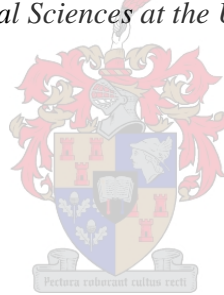


Multilingual Acquisition of Determiner Phrases in L2 English and L3 French by L1 Swahili Speakers in Tanzania

by
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Declaration

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Abstract

This study examined the concurrent multilingual acquisition of second language (L2) English and third language (L3) French Determiner Phrases (DPs) headed by articles, by Tanzanian first language (L1) Swahili speakers. The participants recruited for this study were learning L3 French side by side with L2 English, having started learning English prior to starting to learn French, but before attaining a high level of competency in the L2 English. Therefore, this study is taken as a concurrent multilingual acquisition study as opposed to consecutive multilingual acquisition. In so doing, the study addressed three issues: the effect of the concurrent multilingual acquisition on (in)definiteness marking in L2 English and L3 French, number marking transfer and L3 French interlanguage characteristics of learners who learn English and French concurrently.

Regarding the assumptions of the Fluctuation Hypothesis (FH), the prediction was that learners who learn both English and French would not face difficulties in L3 acquisition of DPs headed by articles since L2 English can transfer positively to L3 French as these languages (unlike the L1, Swahili) both have articles. On the contrary, it was predicted that these learners would fluctuate in the use of definite and indefinite articles in the same fashion in both L2 English and L3 French, as the two languages are being acquired side by side. Moreover, transfer of L3 number marking structures were expected to be non-facilitative either from L1 Swahili, L2 English or both. In addition, the L3 French interlanguage was expected to reveal a number of complex characteristics given the presupposed difficulty entailed in multilingual acquisition.

120 L1 Swahili speaker participants from three secondary and advanced public schools in Tanzania were recruited. These participants were distributed in four groups as follows: 30 form five learners of both L2 English and L3 French, 30 form three learners of both L2 English and L3 French, 30 form two learners of L2 English and L3 French and 30 form two learners of L2 English only. Participants completed an elicitation test composed of cloze, truth value judgement and picture description tasks. The test was composed in both English and French in the same format, although these were not a direct translation of each other. Form two learners who were learning both English and French did both versions.

Through a mirror image method, the form two, L2 group (those who were learning only English) and the L3 group (those who were learning both L2 English and L3 French) were compared using statistical methods. In addition, a cross-sectional analysis across the L3 groups (form two, three and five) was done to determine the role of the year of instruction and the L3

French interlanguage characteristics. Results revealed that the L2 group (learners who acquire only the L2 English) were more accurate in the use of definite and indefinite articles than the L3 group (those who acquire the L2 English and the L3 French concurrently). Moreover, the L3 group performed in the same fashion in the use of both L2 English and L3 French definite and indefinite articles. In the analysis of number marking transfer, L2 English did not show any privileged positive transfer. Instead, there was evidence of negative transfer from the L1 Swahili on both the L2 English and the L3 French interlanguages, from both the L1 Swahili and L2 English on the L3 French interlanguage, and the L2 English and the L3 French on each other. Finally, the L3 French interlanguage characteristics revealed the overuse of the zero article and indefinite articles in places where the definite article was obligatory. However, these characteristics were shown to reduce as years of exposure increased. In addition, in the lower levels, the use of other forms and omission were also revealed as part of the L3 interlanguage characteristics of a multilingual learner.

These results were interpreted as the effect of concurrent multilingual acquisition of two foreign languages. Thus, apart from the linguistic and other external factors, the type of multilingual acquisition process, in terms of the number of languages involved, can also determine the type of interlanguage produced by a multilingual learner. In addition, the current results have shown that transfer in multilingual acquisition is not necessarily facilitative in cases where there are two or more target languages involved in the multilingual acquisition process.

Opsomming

Hierdie studie het ondersoek ingestel rakende die gelyktydige veeltalige verwerwing van tweedetaal (L2)-Engels en derdetaal (L3)-Frans Determineerder Frases (DP's) met lidwoorde as hoof, deur Tanzaniese eerstetaal (L1)-Swahili sprekers. Die deelnemers wat gewerf is vir die studie het L3 Frans tesame met L2 Engels geleer; hulle het Engels begin leer voordat hulle Frans begin leer het, maar voordat hulle 'n hoë bevoegdheidsvlak in die L2-Engels verwerf het. Hierdie studie is dus 'n gelyktydige veeltalige verwerwingstudie, in kontras met opeenvolgende veeltalige verwerwing. Hierdeur ondersoek die studie drie kwessies: die gevolg van die gelyktydige veeltalige verwerwing op die aanduiding van (on)bepaaldheid in L2-Engels en L3-Frans, die oordrag van getal-aanduiding, en L3-Frans intertalige eienskappe van leerders wat Engels en Frans gelyktydig aanleer.

Wat die aannames van die Fluktuasie-Hipotese (FH) betref, was die voorspelling dat die leerders wat beide Engels en Frans aanleer, nie probleme sou ondervind in L3-verwerwing van DP's met lidwoorde as hoof nie, omdat L2-Engels positief oorgedra kan word na L3-Frans, aangesien hierdie tale (in teenstelling met die L1, Swahili) albei lidwoorde het. Intendeel, daar is voorspel dat hierdie leerders sou fluktureer in die gebruik van bepaalde en onbepaalde lidwoorde op dieselfde manier in beide L2-Engels en L3-Frans, aangesien die twee tale gelyktydig verwerf word. Verder is daar verwag dat oordrag van getal-aanduiding in die L3 nie-fasiliterend sal wees van L1-Swahili, L2-Engels of albei. Daar is verwag dat die L3-Franse tussentaal 'n aantal komplekse eienskappe sou vertoon, gegewe die veronderstelde moeilikheidsgraad van veeltalige verwerwing.

120 deelnemers wat L1-sprekers van Swahili was, is gewerf van drie sekondêre en gevorderde publieke skole in Tanzanië. Hierdie deelnemers is verdeel in vier groepe soos volg: 30 vlak-vyf leerders van beide L2-Engels en L3-Frans, 30 vlak-drie leerders van beide L2-Engels en L3-Frans, 30 vlak-twee leerders van L2-Engels en L3-Frans, en 30 vlak-twee leerders van slegs L2-Engels. Die deelnemers het 'n ontlokkingsstoets voltooi, wat bestaan uit 'n "cloze"-toets, die oordeel van waarheidswaarde, en prentjie-beskrywingstake. Die toets is opgestel in beide Engels en Frans in dieselfde formaat, alhoewel hulle nie direkte vertalings van mekaar was nie. Vlak-twee-leerders wat beide Engels en Frans geleer het, het albei weergawes gedoen.

Deur 'n spieëlbeeldmetode is die vlak-twee L2-groep (diegene wat slegs Engels leer) en die L3-groep (diegene wat beide L2-Engels en L3-Frans leer) vergelyk deur middel van statistiese metodes. Verder is 'n kruis-snit-analise van die L3-groepe (vlakke twee, drie en vyf) gedoen

om vas te stel wat die rol van die jaar van onderrig en die eienskappe van die L3-Franse intertaal was. Die resultate het getoon dat die L2-groep (leerders wat slegs die L2-Engels verwerf het) meer akkuraat was in die gebruik van bepaalde en onbepaalde lidwoord, as wat die L3-groep (diegene wat die L2-Engels en die L3-Frans gelyktydig verwerf het) was. Verder was die L3-groep se gebruik van bepaalde en onbepaalde lidwoorde dieselfde in beide L2-Engels en L3-Frans. In die analise van die oordrag van getal-aanduiding het Engels nie enige bevoorregte positiewe oordrag getoon nie. Inteendeel, daar was negatiewe oordrag van die L1-Swahili op beide die intertale van L2-Engels en L3-Frans, van beide die L1-Swahili en L2-Engels op die L3-Franse intertaal, en van die L2-Engels en die L3-Frans op mekaar. Laastens het die L3-Franse intertaal-eienskappe gedui op 'n oormatige gebruik van die nul-lidwoord en onbepaalde lidwoorde in plekke waar die bepaalde lidwoord verpligtend was. Hierdie eienskappe het egter verlaag soos wat die aantal jare se blootstelling verhoog het. In die laer vlakke was die gebruik van ander vorme en weglatings ook kenmerkend as deel van die L3-intertalige eienskappe van 'n veeltalige leerder.

Hierdie resultate is geïnterpreteer as die effek van gelyktydige veeltalige verwerwing van twee vreemde tale. Dus, bo en behalwe die talige en ander eksterne faktore, kan die tipe veeltalige verwerwingsproses, met betrekking tot die aantal tale wat betrokke is, ook bepaal watter tipe intertaal deur 'n veeltalige leerder geproduseer sal word. Verder het die huidige resultate getoon dat oordrag in veeltalige verwerwing nie noodwendig fasiliterend is in gevalle waar daar twee of meer teikentale betrokke is in die veeltalige verwerwingsproses nie.

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List of Abbreviations

ACP	Article Choice Parameter
AJT	Accessibility Judgement Task
CEM	Cumulative Enhancement Model
COSTECH	Commission for Science and Technology
CLI	Cross Linguistic Influence
CP	Complementizer Phrase
D	Determiner/Definiteness
DALF	Diplôme Applofondi de Langue Française
DAS	District Administrative Secretary
DED	District Executive Director
DELF	Diplôme d'Études en Langue Française
DEO	District Education Officer
DP	Determiner Phrase
DMM	Dynamic Model of Multilingualism
FA	Full Access
FH	Fluctuation Hypothesis
FT	Full Transfer
GB	Government and Biding
GenP	Gender Phrase
HK	Hearer Knowledge
I	Inflection
IL	Interlanguage
KLFL	Kiswahili-English Language-French combination
L1	First Language
L2	Second Language
L3	Third Language
L4	Fourth Language
L2 group	Learners of L2 English only
L3 group	Learners of both L2 English and L3 French
Ln	Additional Language
LoLT	Language of Learning and Teaching
MED	Municipal Executive Director

N	Noun
NMP	Nominal Mapping Parameter
Num	Number
NumP	Number Phrase
OQPT	Oxford Quick Placement Test
P&P	Principles and Parameters
PossP	Possessive Phrase
QP	Quantifier Phrase
RAS	Regional Administrative Secretary
SGEN	Subject Gender feature
SLA	Second Language Acquisition
SLL	Second Language Learning
SNUM	Subject Number feature
Spec	Specifier
SPP	Self Perceived Proficiency
SPSS	Statistics Package for Social Science
SR	Specific Reference
SUZA	State University of Zanzibar
SVO	Subject Verb Object
TIE	Tanzania Institute of Education
TLA	Third Language Acquisition
TOEFL	Test of English as Foreign Language
TPM	Typological Primacy Model
TVJT	Truth Value Judgement Task
UG	Universal Grammar

CHAPTER 1

INTRODUCTION

1.1 General introduction

Multilingual acquisition has recently become an area of interest in the field of language acquisition. Consequently, there is a large body of knowledge on the acquisition of a third language. However, examining the acquisition of two or more foreign languages which are acquired concurrently¹ is important for understanding the multilingual acquisition process and the insights underlying the interlanguage structures of multilingual learners.

In this regard, this dissertation examines the multilingual acquisition of second language (L2) English and third language (L3) French Determiner Phrases (DPs) by Tanzanian first language (L1) Swahili² speakers. The focus is on the acquisition of articles (as a subset of determiners) and their associated features. Attention is paid to the use of definite and indefinite articles (henceforth operationalised as (in)definiteness), and number marking. In brief, the study addresses the following issues: the effects of concurrent acquisition of two languages on learners' (in)definiteness fluctuation tendency, the effect of the L2 on the L3 in terms of the transfer of number marking, and the interlanguage³ characteristics of L3 French DPs headed by articles at various stages.

In so doing, this study takes a multilingual acquisition perspective which examines the predictions put forward by Ionin, Ko and Wexler (2004) in the Fluctuation Hypothesis (FH).

¹ The acquisition of two or more foreign languages side by side or in close succession, or starting to acquire one (say, the L2) of these languages before the subsequent one (say the L3), but before attaining high proficiency in the L2.

² While the participants are characterized as L1 Swahili speakers, they are essentially simultaneous early bilinguals, with most having acquired Swahili in addition to, and generally at the same time as, their mother tongue, one of the 117 languages indigenous to Tanzania (Ethnologue 2018).

³ The language system produced by a foreign language learner and which can be taken as a language system on its own (Selinker, 1972).

Furthermore, this study looks at the effectiveness of the L1 status model, the L2 status model, the Typological Proximity Model (TPM) and the Cumulative Enhancement Model (CEM). In addition, the insights gained from the current study are interpreted through the Dynamic Model of Multilingualism (DMM) and the theory of linguistic awareness. Generally, this study is designed to fill the gap that previous L3 acquisition studies have left by not paying attention to concurrent multilingual acquisition of two or more foreign languages.

The rest of the current chapter is organised in seven sections. Section 1.2 provides a rationale for the study by outlining the context of the research. Section 1.3 states the problem, which is followed by the research goals and objectives in section 1.4. The research questions are provided in section 1.5, followed by section 1.6 which gives the scope of the research design and outlines the research methods. The penultimate section 1.7 contains the research predictions, and the chapter concludes with section 1.8 which gives an outline of the organisation of the dissertation.

1.2 Background information

Multilingual acquisition is an emerging research area in the study of language acquisition (Rothman & Halloran, 2013). The interest in multilingual acquisition goes back to the late 1990s and early 2000s when prominent scholars in the field, such as Britta Hufeisen, Ulrike Jessner, Jassone Cenoz, Jason Rothman, Suzanne Flynn, Jennifer Amaro Cabrelli and others (see Aronin & Hufeisen (2009:2-3) for a comprehensive discussion) started examining and proposing the acquisition of an L3 or additional language (Ln) as an independent field to be studied on its own. Moreover, the interest in understanding in detail what is meant by the multilingual acquisition process starts from the fact that a large part of the world is multilingual (Rothman & Halloran, 2013: 52; Rothman, Cabrelli & De Bot, 2013). In fact, the current

multilingual situation in the world is “complex” and “suffusive” (Aronin & Hufeisen, 2009: 104) in the sense that it is in fact normal in most societies.

However, the definition of multilingual acquisition remains ambiguous. For many decades it was taken to be a synonym for second language acquisition (SLA) (Gass & Selinker 2008). More recently, researchers define it as a sub-set of third language acquisition (TLA). According to Rothman, Cabrelli and De Bot (2013), the definition of TLA is not universal. Thus, while SLA is the acquisition of an L2 after acquiring an L1, and TLA is the acquisition of an L3 after acquisition of an L2, multilingual acquisition is broader. Therefore, I am of the opinion that only if we understand the concept clearly, can we be sure of the appropriate methods and design which can lead us to a conclusion about and understanding of the underlying multilingual knowledge.

Hence, any researcher in the field of multilingualism and multilingual acquisition should first attempt to tease apart the meaning and the process of multilingual acquisition and multilingualism from that of SLA, TLA and bilingualism. According to Kemp (2009: 13), doing that will help to specify what is meant by multilinguals, multilingualism and multilingual acquisition. For the purposes of this dissertation, multilingual acquisition is considered to be a process of acquiring more than one language, either consecutively (the acquisition of a subsequent non-native language after another) or concurrently (the acquisition of two or more non-native languages at the same time). The former process is referred to as primary learner multilingualism while the latter is referred to as secondary learner multilingualism (Herdina & Jessner, 2000:125). From this point of view, multilingual acquisition could involve a different process from first, second and third language acquisition. A discussion of the meaning and parameters of multilingual acquisition will be given in detail in chapter two.

A considerable amount of multilingual acquisition research has assessed the consecutive multilingual acquisition process under the cover term of TLA. Although these previous studies sometimes used an L2 group as a mirror image to an L3 group, less attention has been paid to the concurrent acquisition of two or more languages. Cabrelli, Flynn and Rothman (2012) recommend that future researchers in multilingual acquisition should be sensitive to who should be included as a multilingual learner in their samples. These authors pose issues such as the case where an adult, who has learned two languages after their L1 and has mastered the two languages to the highest proficiency, is now sequentially learning another foreign language. Can they be termed as a multilingual learner or an L3 or L4 learner? What about an adult who begins to acquire two languages in close succession to each other, after their L1, and has not reached a high proficiency in either of the languages, are they a multiple L2s, L3 or multilingual learner?

In this study, a learner who acquires an L2 in close succession with an L3 before reaching a high proficiency in either of these languages is taken to be a multilingual learner. Therefore, the concern of the current study is to discover if the concurrent multilingual acquisition process of two non-native languages has an influence or effect on the multilingual interlanguage characteristics. In this regard, the acquisition of L2 English and L3 French DPs headed by articles is examined in the L1 Swahili speaking learners of these languages.

Trends in assessing the acquisition of articles go back to Ionin (2003) and Ionin, Ko & Wexler (2004). These authors argue that English L2 article usage stems from the UG Principles and Parameters influence on the choice of articles the learners make. They call this situation the Article Choice Parameter (ACP) which is defined in two settings: definiteness [\pm definite] and specificity [\pm specific]. Definiteness implies that both the speaker and the hearer have some knowledge about the nominal referent which is referred to in that context; and specificity refers

to the speaker's intent to refer to a unique referent with some noteworthy property (Zabor, 2011). Therefore, learners whose L1 has no definite article system will, at the initial stage, fluctuate between the two article parametric settings. This hypothesis is titled the Fluctuation Hypothesis (FH) (Ionin, 2003; Ionin et al., 2004). The ACP and FH will be described later in chapter two.

The FH has received a considerable attention, especially in L2 research on the acquisition of articles. While some studies confirm the FH (for example, Goad and White, 2004; Hawkins 2005; Ghisseh, 2009; and Kimambo, 2016), other studies (for example, Deprez, Sleeman and Gruella, 2011) show that even L2 learners whose L1 has articles tend to fluctuate while using articles in the L2. However, previous research on the acquisition of articles in an L2 agree that the L2 article interlanguage is characterized by errors of omission and substitution, where learners tend to use indefinite in the context of definite, and vice versa; and definite and/or indefinite in the context where a zero article should be used. These interlanguage characteristics have also been observed in L3 article use (see Gutiérrez-Magando and Martínez-Adrián (2018) for acquisition of L3 English articles). Although the FH has been tested in L2, as well as in L3 contexts, it is not clear whether the concurrent multilingual acquisition of two languages can be a variable for these fluctuation tendencies.

Hence, it is of interest to test whether the L1 Swahili (an article-less language) learners, who are in the process of concurrently learning L2 English and L3 French, will fluctuate similarly or differently in their L2 English as in their L3 French article usage. In addition, this study examines the extent to which the learners who learn L2 English concurrently with L3 French produce errors of substitution and omission in using L3 French articles. This is operationalized in this study as interlanguage characteristics. Moreover, this study also examines the transfer

effects of the previous languages on acquisition of the L3, which is the prevalent research agenda in the field of multilingual acquisition.

The arguments surrounding the role of previous known languages on acquisition of the L3, or as it is sometimes referred to, the influence of the L2 on the L3 or cross-linguistic influence, have been extended from the research agendas which sought to understand whether L2 learners have access to UG or transfer their L1 structures to their L2. From this perspective, UG initial state hypotheses, such as Schwartz and Sprouse's (1996) Full Transfer/ Full Access (FT/FA) hypotheses (Garcia-Mayo, 2009; Zabor, 2011), were tested. On the one hand, FT hypothesizes that L2 learners fully transfer the L1 grammar to the L2 grammar at the initial⁴ state of L2 acquisition. On the other hand, the FA hypothesizes that L2 learners are fully constrained by UG at the initial state of L2 acquisition.

In spite of the observation of FT/FA in L2 studies, the question remained unclear with regard to the multilingual acquisition process because, in multilingual acquisition, transfer to an L3 can be from an L1 or an L2 or both. Consequently, prominent studies on multilingual acquisition (such as, Cenoz, 2001; Hammarberg, 2001; De Angelis & Selinker, 2001; Gibson, Hufeisen & Libben, 2001; Murphy, 2003; Flynn, 2004, 2009; Leung, 2005, 2007; Jaensch, 2008, 2009, Foote, 2009, Rothman, 2011; Falk & Bardel, 2011; Garcia-M & Rothman, 2012; De Bot, 2012, Bardel & Falk, 2012) focus on examining whether, in the initial state account, transfer on the L3 comes from an L1 or an L2 or both.

In summary, the arguments around L3 transfer have led to the formulation of various L3 acquisition models (see Rothman, Iverson and Judy, 2010; Garcia Mayo & Rothman 2012:16-19) to address and explain the different views which encompass L3 acquisition. These models (as presented in the introduction section) are the Cumulative Enhancement Model (CEM),

⁴ The earlier unconscious knowledge which the L2 learner starts with (Hyams, 1986; White, 2003).

Typological Primacy Model (TPM), the L2 Status model and the L1 status model. The assumptions held in these models will be reviewed in the theoretical chapter two and the studies which have tested them will be reviewed in detail in literature review chapter four. Likewise, the purpose of this study is to assess the effectiveness of these models in explaining the source of transfer to an L3 which is acquired concurrently with an L2.

A good number of multilingual acquisition studies have been carried out in respect of transfer issues in L3 acquisition. Among others, Leung (2005) tested the source of transfer in L3 French learners' production of articles. She compared two groups: L1 Cantonese-L2 English learners of L3 French, and L1 Vietnamese learners of L2 French. Her assumption was that transfer should come from the L2. In her results, the L3 French group correctly produced the definite articles more often than the L2 French group. She claimed that L1 transfer does not play a greater role, but that L3 positive transfer, according to her study, comes rather from the L2.

Leung (2007) subsequently examined the acquisition of articles by L1 Cantonese-L2 English learners of L3 French. Participants performed different tasks including elicited oral and written production tasks, and multiple choice and preference tasks. The results of her study revealed that the L1 does not transfer its structures to the L3. She argues that the L3 is not an extension of the L2 because no L2 transfer was revealed at the initial stage. Therefore, she concludes that difficulties in L3 acquisition of nominal functional properties come from learners' processing constraints.

Jaensch (2008) investigated the presence of explicit and implicit articles in the L3 German of L1 Japanese-L2 English speakers. The results revealed a slight fluctuation in the selection of subject based on definiteness and specificity. Results further showed the omission of articles in the oral production task. Jaensch (2009) followed this up by looking at L3 German acquisition of DPs, focusing on definiteness, gender and number marking, by L1 Japanese

speakers, with different levels of L2 English proficiency. She sought to discover if learners with higher L2 English proficiency would outperform their counterparts in L3 German gender marking and case assignment. Results show that the higher proficiency group outperformed the lower proficiency group. These results support the assumption that L3 fluctuation of definiteness by L1 Japanese speakers [-article] who learn L2 English [+article] and L3 German [+ article] decreases with an increase in learners' L2 proficiency.

Footen (2009) tested the role of typological similarity to determine transfer in three groups: L1 English, L2 Romance and L3 Romance; L1 Romance, L2 English and L3 Romance; L1 English and L2 Romance. The selected Romance languages were Spanish, French and Italian. Results show that typological similarity between L3 and L2 was a factor for L3 positive transfer. However, in a study which looked at L2 proficiency level and the role of tasks as other variables which can regulate the L3 German acquisition adjectival inflections (particularly, gender and number), both CEM and typological primacy factors were not supported (Jaensch, 2010). Jaensch (2010) concluded that the lack of support for these L3 models was due to either the varied combination of the languages in question or the morpho-syntactic interface of the features examined in her study. Taken as a point of departure it seems, therefore, that transfer issues in an L3 are also determined by other factors apart from language similarity or dissimilarity.

Following the same trend, Rothman and Cabrelli (2009) studied morphosyntactic transfer in four groups of adult L1 English learners of French or Italian, who had successfully acquired L2 Spanish. The groups were (i) learners of L2 French, (ii) learners of L2 Italian, (iii) learners of L3 French and (iv) learners of L3 Italian. The authors examined if previous language knowledge influences the acquisition of the L3 null-subject parameter. Their prediction was that linguistic proximity between the languages would determine L3 initial state positive

transfer. However, from their results, they concluded that the L1 transfer hypothesis in multilingual acquisition is limited and they also questioned the CEM model.

Evidence of previous language transfer on subsequent languages is still inconclusive and debatable. As a result, five points of criticism against the data and results from previous studies can further be examined. Firstly, the research trend in L3 acquisition is, on my view, mostly based on the initial acquisition stage. Less (for example, Garcia-Mayo and Slabakova, 2015; Cabrelli, Felipe and Rothman, 2015; Slabakova, 2017) is done on the interlanguage characteristics regarding the developmental and ultimate attainment stages. According to Alonso and Rothman (2017), initial state data can be a fundamental base for theorizing the L3 developmental and ultimate attainment stages. Secondly, previous L3 acquisition studies are conducted within a research design which labels TLA as multilingual acquisition, but, in practicality, only investigate a single linguistic system. This design lacks a holistic nature (Cenoz, 2013) and can account less for multilingual acquisition issues such as interaction and reverse transfer among the language systems at play (Herdina & Jessner, 2000; Cenoz, 2001; Flynn, 2009; Kullundary & Gabrielle, 2012). Thirdly, as Cabrelli, Flynn & Rothman (2012) point out, these researchers use a comparative fallacy between native speakers and L3 learners to control and account for the L3 underlying knowledge which they have presupposed might be comprised of a complex nature of interacting factors from the process and the languages involved. Fourthly, previous studies used adult learners who were highly advanced in L2 proficiency and neglected learners who learn an L3 and/or an L4 in close succession to the L2 and who have not attained L2 native-like competence (Rothman & Halloran 2013:51). In their view, Rothman and Halloran (2013) suggest that perhaps if these previous studies had used other sets of multilingual learners, they may have had different results and provided support for different models.

Lastly, most of the multilingual researchers focus on Westernized contexts leaving other parts of the world (Tanzania included) under-researched (see Rothman, Cabrelli & De Bot, 2013). In Africa, for example, most multilingualism studies take a sociolinguistic perspective, looking at issues such as language policy and planning, language variation, language attitudes and language status (see Bokamba, 2014 for examples of such research).

In Tanzania, apart from a few studies which examine the acquisition of L2 English as a foreign language, such as Kimambo (2016), who looked at the acquisition of L2 English articles among Tanzanian secondary school students, most scholars (for example, Mohr & Ochieng, 2018; Ochieng, 2015; Qorro, 2004, 2013; Broke-Utne, 2004; Galabawa, 2004; Rubagumya, 1990; Lomax, 1990) focus on the ongoing sociolinguistic debate around Language of Learning and Teaching (LoLT).

However, the linguistic background of Tanzanian native Swahili speaker learners of an L2 or L3 is complex in nature. There are Tanzanians who are born in rural areas. These are by nature native bilingual speakers. They speak Swahili (a national language and a lingua franca) and another mother tongue⁵. On the contrary, those who are born in urban areas speak Swahili from birth and in most cases, do not know any other indigenous language. Both groups have a chance to learn English as both an L2 and a foreign language. But few of them can get an opportunity to learn French as both an L3⁶ and a foreign language. Such learners normally learn both languages side by side from secondary school. Although they have had the opportunity to learn English from primary school, most of these learners still have low English proficiency even in higher school levels and at university (Brock-Utne 2004), and this problem has been associated

⁵ One of the 117 languages indigenous to Tanzania (Ethnologue, 2018).

⁶ Because they start learning French few years after they have started to learn English.

with the sociolinguistic factor that English in Tanzania, despite being an official language, has limited use in everyday settings.

At a societal level, Tanzania is a multilingual society. Bokamba (2014:28) defines societal multilingualism as a situation where, at the community level, two or more than two languages are used. Therefore, Tanzanian sociolinguistics should be viewed from a multilingualism perspective. There are more than 117 ethnic languages and Swahili is a national language and lingua franca. On top of that, the current language policy recognises English, alongside Swahili, as a second and official language (Lomax, 1990). In education, English is the language of instruction and official communication from secondary school to university level. Moreover, English and Swahili are both languages of mass media and social media. English and Swahili are also languages of business advertisement. In education, the language curriculum is multilingual in nature. Cenoz & Jessner, (2009: 122) defines multilingual education as a situation where the language curriculum involves teaching of multiple languages to foster multilingualism. In Tanzania, English and Swahili are taught side by side from primary school level, where Swahili is also a language of instruction and teaching. From secondary school, English becomes a language of instruction and teaching, while both languages, Swahili and English, are taught alongside other foreign languages, for example, French or German, Chinese, Korean and Japanese in some universities. More specifically, French is (in case of public-school curriculum) taught from secondary schools while English starts earlier in Primary school level. Despite the fact that these learners are exposed to English earlier than French, they have not reached a high proficiency in the L2 English due to socio-political factors and continue to learn English side by side with French in secondary school. For this reason, the acquisition of English and French in this study is taken to be concurrent acquisition of two foreign languages.

Therefore, the points above are of interest to enable us to understand further what is meant by, and the characteristics of, multilingual acquisition. Moreover, a comprehensive understanding of multilingual acquisition in Tanzania is important, especially for LoLT planning. Taking the aforementioned research gap as a point of departure, this study examines learners who acquire two foreign languages concurrently. That is, the acquisition of L3 French in close succession to acquisition of L2 English, before the native-like competency stage in the L2 English. In this context, learners start to acquire L2 English from primary school level and continue to learn the language concurrently with L3 French from secondary school level.

1.3 Problem statement

Researchers investigating the multilingual acquisition of morphosyntactic structures, such as the nominal functional projection DP, focus largely on European and Westernised contexts, leaving other parts of the world under researched. Also, they mostly look at one type of multilingual acquisition and neglect the concurrent multilingual acquisition of two foreign languages, such as that of Tanzanian Swahili speakers who learn L2 English and L3 French as foreign languages while their L1s (Swahili and another local language) are definite article-less languages which do not mark number in the same manner as English or French. Examining the concurrent acquisition of English and French by such learners will add to the understanding of the nature of transfer in L3 acquisition and the nature of DP interlanguage structure in a multilingual learner, as well as indicating a way forward for future research on the acquisition of DPs and multilingual acquisition in general.

1.4 Research goals and objectives

This study has two main goals addressed through three specific objectives and five specific research questions. The two goals are to understand the acquisition of DPs and to understand

the characteristics of the interlanguage structures of multilingual learners who learn two foreign languages concurrently. These goals are achieved through the following objectives:

- i. To investigate the effect of concurrent acquisition of two foreign languages on the L2 English and L3 French article production by L1 Swahili speakers.
- ii. To investigate if there is any number marking transfer in L3 French article production from the L1 Swahili and/or the L2 English.
- iii. To understand the characteristics of L3 French DP interlanguage development by L1 Swahili speakers who also learn L2 English.

1.5 Research questions

Given the above objectives, this research seeks to answer the following questions:

- i. To what extent is production of L2 English DPs headed by articles affected by the concurrent acquisition of two foreign languages, with respect to the (in)definiteness fluctuation tendency
- ii. To what extent does production of L2 English and L3 French DPs headed by articles differ, with respect to (in)definiteness fluctuation tendency, when these languages are acquired concurrently?
- iii. To what extent does length of exposure affect the production of L3 French DPs headed by articles, in terms of the (in)definiteness fluctuation tendency, regardless the concurrent acquisition factor?
- iv. What would be the source and form of the number marking transfer on the L3 French article DPs by the L1 Swahili speakers learning also the L2 English?
- v. What are the characteristics of L1 Swahili speakers' L3 French DPs headed by articles interlanguage development?

1.6 The scope of this study's design and methods

In this section the scope of this study's design and methods are briefly introduced. It should be noted that a comprehensive description of the methodology is however given in chapter four. The scope of this study covers the acquisition of English and French DPs, particularly of articles and their associated features, such as definiteness and number. It should not be taken that other types of DPs and language areas are neglected but, following the time and the current

generative research trend, as well as the nature of the languages and learners available in my context, it was concluded that the acquisition of articles should be the first choice of interest.

Therefore, this study has a research design which seeks to understand the whole multilingual system available within a multilingual learner. It is a design which analyses multilingual acquisition as a dynamic system (Herdina and Jessner, 2000; 2002); a holistic design (De Angelis and Selinker, 2001); or a focus on multilingualism design (Cenoz, 2013). In this regard, it does not study the L3 system only, but for example, if a learner is acquiring two languages side by side, takes the position that both systems should be studied and analysed to understand the holistic nature of multilingual interlanguage systems. In addition, this design helps to analyse the interacting factors and the interaction between the languages at play (Herdina and Jessner, 2002).

In short, this study is a comparative design between the L2 English and the L3 French underlying knowledge from the DP production by multilingual learners of the two languages. In this regards, 120 participants: 30 Form Two learners of L2 English foreign language and 90 Form Two, Form Three and Form Five learners of both L2 English and L3 French as foreign languages were recruited to complete an elicitation test composed of cloze, truth value judgement and picture description tasks. The test was administered in both English and French in the same format although these were not a direct translation of each other. Participants who were learners of both English and French did both English and French versions.

No control group was used, however, as previous researchers have challenged the use of a native control group; because multilingual acquisition is something which cannot be compared in such a simple way (Cenoz, 2013). The two groups, the L2 and L3 groups, controlled each other through a mirror method. Finally, quantitative research methods were used because a

need for generalisation and an understanding of the collected data through statistical methods was vital.

This study focuses on the Tanzanian mainland and examines secondary and advanced secondary school learners of English and French who speak Swahili and possibly another mother tongue as their L1s. Three schools in rural areas and three schools in urban areas of Tanzania were part of the study. The focus in the choice of the research area was to sample participants who have the same, or similar, linguistic backgrounds. In the following section predictions of the research design and methods, as well as the research questions are presented.

1.7 Predictions of the study

Swahili does not have articles like English and French. It also does not mark gender and number features in the same way as in English or French. Although Swahili is said to have a DP system (see, Carstens, 1991; Rugemalira, 2007; for a description of DP systems of some Bantu languages), it does not have DPs headed by articles. On the contrary, English and French both mark definiteness through the use of article systems. Moreover, French marks number features through article forms and morphological affixes, especially on plural nouns. By contrast, English marks number features only through the morphological affixes on the nominal stem. But the occurrences of English articles sometimes depends on the singular or plural forms of a noun (Lyons, 1999). The concern in this section is not to state the cross-linguistic differences or DP parameter settings among the languages, but to provide the predictions that underlie this study.

With regard to the first research question, it is predicted that if the concurrent acquisition of two foreign languages which are closely related to each other and are being learnt concurrently does not cause any learning difficulty, the L3 group (that is, the L1 Swahili speakers who learn concurrently the L2 English and the L3 French) will outperform the L2 group (that is, the L1

Swahili speakers who learn only the L2 English) in L2 English article production. If this happens as predicted, it will, on one hand, be an indication of support for the role of linguistic awareness, which proposes knowing the L2 before the L3 is a determining factor for successful learning of a subsequent language. On the other hand, if it happens to be different from this prediction, it will provide some support for the DMM theory and evidence for the negative effect of the concurrent acquisition. Regarding research question two, it is predicted that the L3 group participants will not fluctuate in their L2 English article production as they do in their L3 French article production, given the different intervals in terms of the years of instruction in L2 English and L3 French. Therefore, these learners are expected to fluctuate more in the use of L3 French articles rather than in the use of the L2 English articles. In other words, the learners are expected to perform better in their L2 English rather than in the L3 French. However, the fluctuation tendency in L3 French article use is predicted to decrease as the years of instruction (class level) increases. In this case, the higher-level classes are expected to perform better than the lower levels.

Regarding number marking transfer and test for multilingual acquisition models with our L3 group (L1 Swahili-L2 English-L3 French) as compared to the L2 group (L1 Swahili-L2 English), the L1 status factor model, on the one hand, would predict no influence from L1 Swahili on the acquisition of either the L2 English or the L3 French, hence both groups would perform similarly in the L2 English number marking. On the other hand, the L2 status factor would predict that the L2 English will have a privilege on transferring its structure to L3 French. Therefore, the L3 group participants would perform better in their L3 French number marking. Finally, the CEM model predicts that the L1 Swahili or the L2 English would show a privileged status, but the transfer would only materialize if it is facilitative. Therefore, for the CEM, the L3 group participants are not only expected to perform more accurately in L3 French number marking, but also non-facilitative evidence will not obtain.

However, with the current participants' linguistic backgrounds and the current design and methods in general, I predict that the current learners will transfer negatively the L1 Swahili or the L2 English or both structures on L3 French because these learners have not reached a certain level of high proficiency in the L2 English, and their L1 Swahili has divergent number marking structure from both target languages. Therefore, the L3 group participants are expected to perform similarly in their L2 English and L3 French number marking. In addition, transfer, whether from L1 Swahili or L2 English, is expected to reveal as negative transfer (non-facilitative transfer).

Regarding other multilingual acquisition theories, the DMM predicts the current experimental group to be facing dynamic multilingual acquisition complexities, therefore, the L3 group is not expected to outperform the L2 group in any way. From the linguistic awareness perspective (Jessner, 2006), the experimental group (L3 group participants) are experienced language learners who possesses high meta-linguistic awareness. Therefore, the L3 group participants are expected to outperform the L2 group participants in some way.

The last research question predicts that the production of L3 French articles will reveal systemic interlanguage characteristics across the cross-section groups. It is, however, hoped that an improvement in L3 article production will be observed as the length of instruction increases.

1.8 Organisation of the dissertation

This dissertation is organised in eight chapters as follows. Chapter one starts by introducing the rationale of the study, the problem statement, objectives, as well as research questions, and ends with the scope and organization of the dissertation. In chapter two, the issues concerning the theories which frame and define this research are presented. The approaches and trends of research in the field of multilingual acquisition are presented first. Then, assumptions related

to Universal Grammar (UG) and generative linguistic theory, Principles and Parameters, as well as the DP hypothesis follows. Subsequently, the acquisition models and hypotheses which frame the L2 and L3 acquisition of articles are discussed. Lastly, the way in which the terms, “acquisition” and “learning” are used, and the sociolinguistic use of these terms in Tanzanian contexts are described. In this chapter, multilingual acquisition is furthermore differentiated from other types of acquisition.

Chapter three presents the DP structure in Swahili, English and French, while chapter four provides the literature review. This chapter reviews the multilingual acquisition research designs and methods and some L2 and L3 empirical studies and concludes with an indication of the originality of this study. The research design and methodology follow in chapter five. The design which has been used for this study is a cross-section design, presented first before the discussion on comparative and experimental designs. The methods of sample selection, population, tasks and research area are presented before the presentation of the data collection, analysis and presentation methods.

Analysis, results and discussion of the results are presented hierarchically in chapter six and seven. The analysis, results and discussion in relation to research questions one, two and three are presented first in chapter six while the analysis, results and discussion in relation to research questions four and five are presented in chapter seven. Finally, chapter eight gives a summary and the overall conclusions of the study, as well as recommendations for future research.

CHAPTER 2

THEORETICAL FRAMEWORKS

2.1 Introduction

The aim of this chapter is to present the theoretical frameworks underpinning the current study and provide definitions for some key terms related to the scope of this study. This chapter is structured as follows: in section 2.2, different perspectives and approaches that are typically used to research multilingual acquisition are introduced to provide a background to the frameworks underpinning this study. Section 2.3 outlines Universal Grammar (UG) in the generative grammar framework, focusing on its implications for the present study. Presented are the notion of the DP hypothesis and the Principles and Parameters (P&P) perspective. These are presented because the current study examines determiners which are framed within the P&P perspective and the DP hypothesis. Then, section 2.4 discusses the notion of access to UG, especially in non-native language acquisition, against the notion of transfer. The Fluctuation Hypothesis (FH) and the Article Choice Parameter (ACP) will also be discussed in this section, in order to explain how the FH and the ACP are operationalised in the current study. In section 2.5, two other frameworks are presented. These are the Dynamic Model of Multilingualism (DMM) (Herdina and Jessner 2000; 2002) and Jessner's (2006; 2008a) metalinguistic awareness perspective for multilingual competence. Although these frameworks are unrelated to generative theory, they are considered because multilingual acquisition is a complex process (Cenoz, 2000; 2011) which cannot be interpreted from a single perspective. Section 2.6 concludes the chapter and describing the key terms of this study.

2.2 Approaches and research areas in multilingual acquisition

In this section, different research approaches or, as Cenoz (2000) calls them, areas, in multilingual acquisition are presented. Multilingual acquisition can be researched from different perspectives (see De Angelis & Dewaele (2009), Rothman, Cabrelli & De Bot (2013) and Garcia-Mayo and Alonso (2015) for a comprehensive explanation of different approaches). Briefly, in an education and pedagogy approach, one can examine the insight underlying the concept of multilingual education (Cenoz, 2009; Cenoz and Jessner, 2009). In a sociolinguistic approach, one needs to understand the role of communicative competence, language attitudes, emotions, language status as well as language policy and planning. In cognitive and psycholinguistic approaches, one can research the role of variables such as multilingual language processing and production, the role of age and other individual cognitive factors, language proficiency and metalinguistic awareness. In a functional approach (for example, Sanz, Park and Lado, 2015), one can study the acquisition of morphosyntactic form-function mapping in language beyond L2.

Finally, in a formal linguistics theory approach (a generative UG perspective), researchers can study the underlying language system, its characteristics and the factors that trigger it in a multilingual learner's mind. Regarding the generative perspective, one can research early multilingualism, where a child can acquire more than two languages in childhood; the effect of bilingualism on multilingual acquisition, where the hypothesis is that bilingualism can trigger L3 acquisition; or the effects of the interdependence between L1 development and L2 or L3 skills, where most L3 researchers hypothesize that proficiency in previous language(s) can affect the acquisition of a subsequent language (Cenoz, 2000).

The fourth and most prevalent research area to date, which is also the focus of the current study, is cross-linguistic influence or previous language transfer. Cross-linguistic influence is a

general term for language transfer, interference and borrowing (Cenoz, Hufeisen and Jessner, 2001:1). According to De Angelis and Selinker (2001), transfer in L3 acquisition includes different forms, such as native language transfer (L1 transfer), avoidance, reverse transfer, where it can be from a subsequently learned language to previously learned languages, and interlanguage transfer, where a non-native system influences subsequent language acquisition. De Angelis and Selinker's (2001) idea of interlanguage transfer is tantamount to saying that the transfer effect is not necessarily from previous to subsequent languages. Therefore, such an influence can take place between L1 and L3, L2 and L3 or L1, L2 on L3, or all languages can influence each other in the process of language development (Cenoz, Hufeisen & Jessner, 2001). The transfer perspective will be discussed later, for now the discussion is turned to the generative framework.

2.3 UG in a generative framework: Principles and Parameters (P&P)

This study is situated in a formal second/third language acquisition research trend, namely generative SLA/TLA. Thus, the methods and interpretation of results are guided by the broad framework of generative grammar, and the competition between various SLA/TLA hypotheses and models.

Generative grammar assumes that human language is formed on the basis of the subconscious system of rules (grammar) which are part of a person's innate language ability, or UG. Moreover, these language rules and principles are generative in the sense that they can generate the combinations of words to make grammatically correct sentences (Carnie, 2013). Therefore, generative grammar tries to define the underlying system of rules and principles and explain how speakers of a language use the grammar of their language (Carnie, 2013). In other words, generative grammar proposes descriptive rules for a language; the rules for the actual construction of sentences by language users (Carnie, 2013). Generative grammar has taken

various forms, namely Transformation Grammar (TG), Government and Binding Theory (GB), Principles and Parameters approach (P&P), and most recently, Minimalism (Carnie, 2013).

Thus, while generative theory accounts for language principles and rules which are shared by all languages, it also accounts for variation among languages (Hyams, 1986; Hawkins, 2001; Carnie, 2013:27). This view is captured by the P&P approach which proposes that there are principles which govern all language structures, and innate parameters, the settings of which vary from one language to another (White, 2003).

By definition, principles are those subconscious language rules which remain the same in all languages. Parameters, on the other hand, are those subconscious linguistic features which diverge in the way they allow structural forms in one language or another (Gass & Selinker, 2008; White, 2003). In generative linguistic literature there are a number of examples of principles, the features shared by all languages, and parameters, the features which vary across languages. Given the scope of the current study, the parameter which accounts for the structure of DPs are presented in the following paragraphs.

Determiners, such as articles, quantifiers, possessives, are obligatory in some languages while in other languages they are optional or perform other structural functions. This parametric variation can be accounted for by the Nominal Mapping Parameter (NMP), proposed by Chierchia, Guasti and Gualmini (2001, cited in Prévost, 2009). According to the NMP, noun features are characterised in terms of two universal features: [+argument] or [+predicate]. Thus, nouns which are [+argument] do not need determiners to enable them to function as arguments. Contrary to that, [+predicate] nouns cannot appear in an argument position without a determiner. Briefly, [+argument] nouns form bare noun phrases (NPs) while [+predicate] nouns cannot, and must be complements of a DP (Prévost, 2009: 247).

An illustration of the NMP can be drawn from the DP parameters of the languages in question in the current study. Swahili, like other Bantu languages, is an article-less language which marks definiteness in other ways from French and English. In most cases it possesses bare NPs. Therefore, in this regard, Swahili nouns are [+argument]. French nouns on the other hand, are [+predicate] as French does not allow bare NPs. English is a Germanic language. Like other Germanic languages, English nouns are [+argument]/[+predicate]. Therefore, English allows both bare NPs and NPs which form the complement of a DP. So, L1 Swahili learners of these two foreign languages are expected to reset these parameters when learning L2 English and L3 French. Now, the discussion is turned to the DP hypothesis. A detailed analysis of the DP parametric differences between Swahili, English and French are discussed later in chapter three.

2.3.1 The Determiner Phrase hypothesis: The NP (no DP) versus DP analysis

In the P&P approach, the DP hypothesis was proposed as a way to overcome problems with the traditional analysis of nominal phrases as NPs. The DP hypothesis proposes a syntactic structure framework which maintains that a traditional functional word, the Determiner (D), is not actually a specifier (Spec) of an NP structure, but instead heads its own phrasal projection, a DP, and the traditional NP becomes its complement (Carnie, 2013; Coene & D'hulst, 2003). Therefore, according to the DP Hypothesis, nominal structures are headed by a functional category, D. In this view, all functional words, such as articles, possessives, demonstratives and quantifiers, have a status of head and all (in)definite expressions have the status of DPs. The two syntactic tree diagrams below in Figure 2.1 and Figure 2.2 illustrate the two analyses of nominal phrases. In the traditional view, the definite article *the* is a D which functions as a Spec and combines with an intermediate noun projection N' to yield the topmost projection NP. But in the DP hypothesis view, the definite article *the* is a D head which combines with an NP to form DP as a maximal projection on its own.

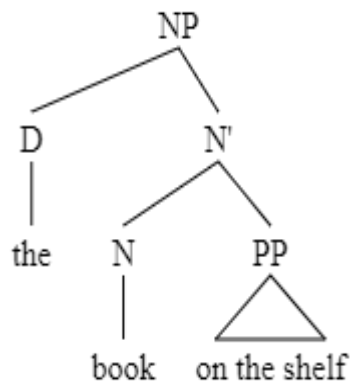


Figure 2.1 NP Formal representation: Traditional view

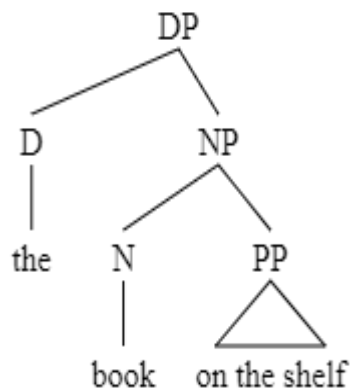


Figure 2.2 DP Hypothesis Framework

(the two figures were adapted and modified from Carnie, 2013:197)

The DP hypothesis is supported by evidence from the behaviour of definite and possessive nominal phrases, such as those in examples (2.1) and (2.2). In these constructions the determiner *the* is in complementary distribution with the possessive marker *'s*, as illustrated by the ungrammatical example (2.3), which indicates that they are in fact the same thing.

(2.1) the translation of the book

(2.2) John's translation of the book

(2.3) *John's the translation of the book

(Coene & D'hulst, 2003:01)

In terms of the DP hypothesis, however, both *the* and *'s* occupy the head D position and the possessor, in this case *John*, appears in the Spec position of DP, as illustrated below in figure 2.3 and figure 2.4 (adapted and modified from Coene and D'hulst, 2003: 01).

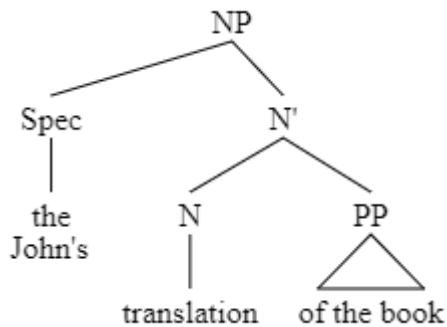


Figure 2.3 Possessive nominal phrase as NP

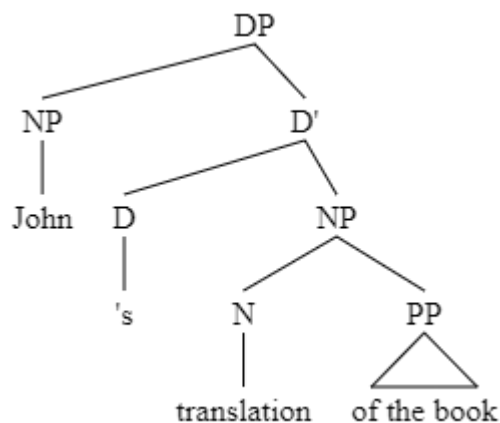


Figure 2.4 Possessive nominal phrase as DP

Another argument for the determiner phrase was proposed by Abney (1987). Abney argued that the function category D holds a syntactic and semantic status similar to that of the verbal inflection category I. Semantically, D and I are said to have similar functions. D pre-determines a noun phrase by specifying its extensive NP member while the verbal inflection head I does the same with verbs.

A question raised by the DP hypothesis, and which is still debated, is whether languages which are article-less, such as Swahili and other Bantu languages, do possess such a DP projection in

their formal syntactic representation (Progavac, 1998). And if yes, what the nature of this projection is. Two competing arguments are proposed: the argument for an NP (no-DP) analysis and that for the DP analysis.

On the one hand, researchers such as Carstens (1991), Longobardi (1994), Progavac (1998) and Giusti (2002), who have analysed the DP projection in various Romance and Bantu languages, argue for a DP projection above an NP level. Their main argument is that since definiteness is universal, and many article-less languages have different ways of marking definiteness on noun referents, these article-less languages also project a DP regardless of the absence of an overt definite article.

On the other hand, the NP (no-DP) analysis is supported by researchers such as Bošković (2005, 2009) who proposes that demonstratives and possessives behave like adjectives since they can concurrently occur together, they cannot mark specificity as articles do in article languages, and they can be freely positioned before and after the noun they modify. Therefore, with these adjectival characteristics, they cannot head a DP and take an NP as their complement. Instead, they should be analysed as specifiers in an NP analysis.

Lyons (1999), Trenkic (2004), Snape (2006), and Avery and Radišić (2007), in turn, totally reject the presence of a syntactic category D in a language which lacks overt definite articles. They propose that if a language has no articles, its syntactic analysis should be based on an NP analysis rather than a DP analysis.

These two views are dichotomic. Therefore, a researcher needs to make a choice between an NP analysis or a DP analysis, in relation to the research questions s/he wants to answer. Some researchers show a contradictory position in the way they argue for or against the two analyses. Kimambo (2016), for example, agrees that languages without articles mark definiteness and specificity in the same way that other languages with overt articles do. As Kimambo (2016: 3)

notes, article-less languages normally mark definiteness through subject and object markers, demonstratives, possessives and through the context of interaction. At the same time, this author concludes that English and Swahili differ from each other in that English is article language, with a D category pre-nominally and has a DP projection; while Swahili allows bare NPs, and is article-less, but positions a D category post-nominally and has no DP projection.

This distinction is not clear, since on one hand it supports the argument that article-less languages mark D-elements and definiteness through various morphosyntactic and semantic features, while on the other hand, it rejects the DP projection. Literature on DP analyses in article-less languages have revealed that different morphosyntactic elements and semantic features carry a determiner function and head the DP. For example, Serbo-Croatian, a language without articles, shows evidence of a D category position through pronouns and other morphological functional categories above the NP level (Progovac, 1998).

In terms of a DP analysis, Carstens (1991: 112) proposes that Swahili nominal phrases are DPs, but with empty D heads. In order to account for the post-nominal position of demonstratives, possessives, quantifiers, and numerals, she argues that the noun moves via head-to-head raising to the D. Ndomba (2017), in turn, argues that the NP, base generated below D, raises to spec of DP. He points out that such an analysis allows for definite article-like elements to occur in D. Ndomba (2017), in fact, argues that prenominal demonstratives do occupy D and as such function as definite articles.

Given these different accounts of the DP structure of article-less languages, I am in a position to argue that the determiner role in article-less languages is carried out by demonstratives (*this, these, that, those*), possessives (*my, your, our, his, her, their*), quantifiers (*each, every, all*), numerals (*one, two, three*); and even through other morphological means. In particular, demonstratives have been analysed as carrying the typical functions of the English definite

article, especially when they are positioned pre-nominally (Ndomba 2017, Kimambo, 2016, Rugemalira, 2007; Carstens, 1991).

In brief, the DP hypothesis and the arguments raised about it are presented in this subsection. It should be noted that this discussion is pertinent to the current study as the study examines the acquisition of DPs. However, the scope of the current study is beyond the critical debate regarding the two views about the representation of D and DPs in article-less languages. Yet, it is a good idea to show a position forward between the two views. Therefore, in chapter three, where the discussion about the DP structure of Swahili, English and French is presented, the view that Swahili is determiner-less is rejected. It will be shown that, although Swahili lacks overt definite articles, it marks definiteness through other morphosyntactic and semantic categories. In the following subsection, the transfer perspective versus the access to UG and the notion of parameter setting and resetting, is presented.

2.4 Access to UG, parameter resetting and language transfer perspectives

UG is the theory of the subconscious, innate language principles which are taken to be universal across all human languages (White, 2003; Thomas, 2004). The main assumption of UG, first proposed by Noam Chomsky, is that UG stems from an innate language faculty that constrains the way a person develops the grammar of their language. Evidence for this theory comes from the “poverty of stimulus hypothesis” which claims that children are able to acquire any human language and be able to form novel language forms despite the limited input they receive (White, 2007). Thus, UG theory has the goal of accounting for the nature of learners’ complex (inter)language systems.

In the process of language acquisition, UG principles and parameters are said to be operative in child L1 acquisition. The poverty of the stimulus hypothesis was put forward in support of UG operation in the way children acquire the L1 (Gass and Selinker, 2008). The fact that

children are able to produce adult language constructions which are beyond the input they encounter (Hyams, 1986), suggests an inborn capacity.

However, in language acquisition beyond the L1 the question persists as to whether UG really constrains L2 acquisition or the acquisition of languages beyond the native language, as it is assumed to do with L1 acquisition. This question is based on the initial state, the unconscious knowledge which the L2 learner starts with (Hyams, 1986; White, 2003), of L2 acquisition. In this sense, UG is argued to be the starting point of L2 acquisition (Thomas, 2004). In other words, the L2 learners are said to access the UG principles and parameters in their initial state of L2 acquisition. This hypothesis is described as the logical problem of language acquisition because L2 learners seemed to construct complex interlanguage properties beyond the input they receive (Hawkins, 2001). The main assumption in terms of the role of UG in L2 acquisition is that input alone cannot enable a learner to reach native-like competence (Gass and Selinker, 2008) and thus, a learner's initial interlanguage knowledge is triggered by these universal innate language principles and parameters. Therefore, in SLA research, two contesting hypotheses have emerged regarding the kind of grammar the L2 learner starts with (Gass and Selinker, 2008): the Full Transfer (FT) hypothesis and the Full Access (FA) hypothesis (Garcia-Mayo, 2009; Zabor, 2011). The former states that L2 learners fully transfer the L1 to the L2 grammar, and the latter says that L2 learners are fully constrained by UG at the initial state of L2 acquisition. Moreover, against the background of these two hypotheses, three hypotheses emerged regarding the L2 initial state knowledge. The no access to UG hypothesis proposes that the L2 initial state is triggered by L1 transfer. The UG access hypothesis argues that UG is still available in the L2 initial state. Finally, the full access-full transfer (FA/FT) hypothesis of Schwartz and Sprouse (1994; 1996; 2000) proposes that both UG and L1 transfer are fundamentally available in L2 initial state interlanguage. The FA/FT hypothesizes the notion of parameter setting and resetting which is described in the following subsection.

2.4.1 The FA/FT: The notion of parameter setting and resetting

With respect to FA to UG versus FT, on the one hand, when there is evidence for ease in structuring the L2 interlanguage grammar due to the L2 features related to the L1 grammar, it means UG principles and parameters are operative (White, 2007; Gass and Selinker, 2008) and there is access to both parameter settings. On the other hand, where the target language grammar implies difficulties due to different L1 and L2 parameter settings, it means there is evidence of UG parameter resetting (Gass and Selinker, 2008; Hyams, 1986), where the access to UG in L1 only yields difficulties or L2 non-target-like forms. Thus, parameter resetting is when a learner fixes the L1 parameter at the value which matches the L2 parameter. It is argued that, for a learner whose L1 is close to the L2, the parameter resetting difficulties are at minimal level compared to a learner whose L1 is far from the L2. In the case of this study, we expect parameter resetting difficulties to be high because Swahili has different article parameter settings from English and French.

Regarding the acquisition of articles, the prevailing parameter setting issues have been debated since the proposal of the Article Choice Parameter (ACP) by Ionin (2003) and Ionin, Ko and Wexler (2004). Therefore, in the next subsection, the ACP and its Fluctuation Hypothesis (FH) are discussed before the notion of transfer which is entailed in FT.

2.4.2 The ACP and FH perspectives: The definiteness and specificity parameters

The ACP is the current L2 UG parametric account for learners' choice of article usage (Ionin, 2003; Ionin et al., 2004). The ACP and previous researchers who tested it are reviewed in chapterfour of this thesis. In this section, the ACP is described as one of the frameworks which shaped the current study.

According to Ionin (2003), the ACP involves two article settings. The first setting is the definiteness setting. This proposes that, for languages with two articles, articles are distinguished in terms of definiteness. The second setting is the specificity setting. According to this parameter, articles are distinguished in terms of specificity (Garcia-Mayo, 2009). In L2 acquisition of articles, learners are argued to be triggered by these UG parametric settings especially in the initial state. Ionin's (2003) proposal is that UG is operating in the way L2 learners learn and use articles. These learners are said to choose articles from the above two article settings. Moreover, learners with an L1 which has a different article parameter setting from that of the L2 face some difficulties in resetting such a parameter in their L2 interlanguage. Therefore, these learners will show fluctuation between the use of definite and specificity settings (Ionin, 2003; Ionin et al., 2004). But learners with an L1 which is closely related to the L2 article parameter setting should be able to set the said article parameters correctly and easily in their interlanguage. The pioneers of the ACP defined these fluctuation tendencies in terms of the Fluctuation Hypothesis (FH):

(2.4) Fluctuation Hypothesis

- a. L2 learners have full access to UG principles and parameters settings
- b. L2 learners fluctuate between different parameter settings until input leads them to set the parameter to the appropriate value.

(Ionin et al., 2004:17)

As Garcia Mayo (2009) points out, Ionin et al. (2004) claim that L2 learners whose L1s lack articles have full access to UG, and thus have full access to ACP, and as they have no possibility of L1 transfer of article semantics, they are expected to fluctuate more often between the two settings of the ACP, than their counterparts who speak L1s with article systems. Thus, the article fluctuation tendency is taken as a sign of UG operation or parameter resetting in the use of articles in L2.

The ACP proposes two article settings, definiteness and specificity, thus, the rest of this section discusses these two settings and shows how the ACP and FH were operationalized in this study.

The important question here is what the general defining boundaries for characterising definiteness and specificity are because their characterisation suggests the presence of partial overlaps between the two concepts, especially in the definition and description of the terms. For example, in the definition given by Ghisese (2009), the term “specificity” is defined as a speaker’s intent to refer to a unique individual which possesses noteworthy properties. In turn, definiteness indicates the speaker’s and hearer’s knowledge that the individual is unique in such a given context.

According to Bickerton (1981), the term “specificity” is defined using binary semantic features. These binary features are given as [\pm Specific Reference] or [\pm Hearer Knowledge]. According to these features, an entity is defined as \pm Specific Reference (hence forth, \pm SR) when an article picks out a specific/non-specific referential meaning to the noun it occurs with, in relation to the speaker and/or hearer’s knowledge. On the other hand, the \pm Hearer Knowledge (hence forth, \pm HK), is when an article refer to an entity which is already known (definite noun) by the listener from the previous discourse or general knowledge.

Regarding these binary features, both definite and indefinite articles are distributed in four nominal referentiality functions which describe an entity as being \pm SR. The four contexts as described in Hawkins (2001) are, firstly, when an entity referred to is known to the speaker but not to the hearer. Such an entity is specific [\pm SR]; and an indefinite article will be used. This context is described binarily as [\pm SR -HK]. Examples are given below in (3.30) (adapted from Lyons, 1999 and Hawkins, 2001:334 respectively). In both examples, the speakers are aware of the particular entity they speak about in the absence of the hearer’s knowledge. In (a) it is possible that a speaker is aware of a type of a car he has just bought, while in (b), speaker B is aware of the contacts he has.

(2.5) a. I have bought *a car*

b. Speaker A: How will you get a ticket? Speaker B: I have *contacts*

Secondly, when an entity referred to is known to both speaker and the hearer, the definite article *the* is used. This is described as [+SR +HK]. The examples in (3.31) suggest that the noun *contact* in (c) is specific given that both speaker and hearer share the knowledge of the contact in question. Therefore, the definite article *the* is used in a context as such.

- (2.6) a. Speaker A: How will you get *a ticket*?
 b. Speaker B: I have *a contact*
 c. Is that *the contact* which failed you last time?

(Hawkins, 2001:334)

Thirdly, when an entity is not known to the speaker, but creates a generic referential knowledge to the hearer; such an entity is referred to as non-specific [-SR]. This referentiality function can be picked out by the definite article *the* or the indefinite articles *a*, *an* or \emptyset , respectively, with the morphological properties of a noun (Hawkins, 2001). This context is described in terms of binary features as [-SR +HK].

- (2.7) a. Speaker A: I saw a rabbit eating my carrots yesterday
 b. Speaker B: *The rabbit* can cause problems for the gardener
 A rabbit can cause problems for a gardener
 \emptyset *Rabbits* can cause problems for gardeners

(Hawkins, 2001:235)

Fourthly, when an entity is not known neither by the speaker nor by the hearer; such an entity is referred to as non-specific (-SR), and this referentiality function is pick out by indefinite article forms. This context is described as [-SR -HK]. Examples are presented in (3.33) below, where it suggests that, in sentence b, having a baby is just a plan which does not contain any particular information concerning a specific baby.

- (2.8) a. Speaker A: What does she want to do when she is married?
 b. Speaker B: Have *a baby*

Briefly, the definition and description of specificity as a notion given above, suggest that both definite and indefinite articles carry specific or non-specific referential meaning for their noun complement. Let us consider again Bickerton (1981)'s four contextual uses as illustrated in table 2.1. below.

Table 2.1 Semantic representation of English Articles in relation to Bickerton (1981)'s

Contexts

	+SR	Binary Context	-SR	Binary Context
+HK	<i>The girls</i> you met at church came to visit me yesterday	[+SR +HK]	<i>The cat</i> eats rats <i>A cat</i> eats rats <i>Cats</i> eat rats	[-SR +HK]
-HK	I bought <i>a car</i> last month	[+SR -HK]	<i>A cat</i> was eating <i>a rat</i> in the kitchen	[-SR -HK]

Thus, determining the boundary for a noun to be defined as specific or non-specific, especially with the definite-indefinite English article dichotomy, is still complex. In the table above, the general clues for a noun to be specific or non-specific depend neither on a speaker's intent to refer nor on speaker-hearer understanding of the present unique entity. In the first binary context column, the first row suggests an entity is specific due to the speaker's intent to refer and hearer's knowledge, but, in the second row the entity is also specific in the absence of hearer's knowledge. Unpredictably, the last column, the first row suggests the entities are non-specific, with the presence of hearer's knowledge, but both definite and indefinite articles can be employed. The last context [-SR -HK] suggests a non-specific entity in the absence of speaker intent to refer and hearer's knowledge.

However, the arguments above are not for the two semantic views which are presented in Lyons (1999). These views reject the referentiality function of definite and indefinite articles. In brief, one of these views suggests that sometimes definite articles do pick out referential function

with nouns, but indefinite articles do not. Another view suggests that neither definite nor indefinite articles carry a nominal referential function. Although Lyons (1999) does not show support for any of these, he admits that there is ambiguity in the semantic use of definite and indefinite articles.

Therefore, this ambiguity between specific versus non-specific marking, especially with definite and indefinite articles was resolved in this present study by examining only two contexts: the [+SP +HK] and the [-SP -HK] (see also, Gutiérrez-Magando and Martínez-Adrián, 2018) because the former involves only the use of a definite article to refer to specific reference, while the latter requires the use of an indefinite with a non-specific reference. This is operationalised as definiteness (definite versus indefinite), which does not mean that specificity was neglected. Thus, the FH was operationalised in the use of definite in place of indefinite and vice-versa. In the following subsection, the discussion is turned to the notion of transfer within the FT approach.

2.4.3 FT approach: The notion of transfer and multilingual acquisition models

In previous subsection, the notions of access to UG and transfer to subsequent language are discussed. These are two theories which emerged within SLA research from a UG perspective. However, they entail two different viewpoints. On the one hand, access to UG is a claim for the presence of UG operations at the initial state of the L2 knowledge. On the other hand, L1 transfer is a claim against UG presence in L2 knowledge, rather the learner's initial state knowledge is claimed to entail their L1 structure (White, 2003; Gass and Selinker, 2008).

Moreover, it should be noted that language transfer is not part of the UG fundamental assumptions (White, 2015). L1 transfer is a teaching-learning concept in behaviourism theory (Gass and Selinker, 2008). In L2 learning research, where a process meant the development of new habit, the term “transfer” implied the instances in which an L1 influenced or inhibited the

learning process. This term in this era, included instances where L1 could be influential (positive transfer or facilitative) to L2 learning, and instances where the L1 was inhibitive (negative transfer) to L2 learning. According to Van-Patten and William (2007), positive transfer is predicted where the L1 and L2 are closely related while negative transfer is likely when the languages in question are not related or only distantly related.

In addition, it should be recalled that the notion of transfer in multilingual acquisition was extended from SLA (see also Cabrelli and Iverson 2018). Unlike in SLA where the only expected source of transfer is the L1, in multilingual acquisition transfer is expected from all previously known languages; either from the L1 or the L2 or both (Cabrelli, Flynn and Rothman, 2012; Rothman, Iverson and Judy, 2010).

However, transfer effects in multilingual acquisition have also been taken as a non-permanent effect, so to speak. It has been much examined in the initial state of acquisition (Garcia-Mayo & Rothman, 2012), though currently few studies on developmental stages are presented. Studies at developmental stage draw from the observation that previous language influence decreases with an increase in L3 proficiency (see Cabrelli and Iverson, 2018; for a comprehensive review of L3 acquisition at developmental stage). In addition, there are also reports on bidirectional transfer (transfer from subsequent language on previous learned language). Because the developmental state and bidirectional transfer are beyond the scope of the current study, the initial state multilingual acquisition models are presented in the following subsection.

The argument surrounding initial state of multilingual learner is whether transfer to a subsequent learned language comes from the L1 or the L2. With regard to this argument, different initial state acquisition models were introduced. The views and hypotheses which are

entailed in these models appear to contradict one another. For this reason, the discussion is not arranged chronologically, but rather following the structure of the debate.

To begin, the Cumulative Enhancement Model (CEM), was proposed based on the empirical findings by Flynn, Foley and Vinnitskaya (2004). According to the CEM, multilingual acquisition can be influenced by any previous language system available to the learner, but not in a redundant way. The redundancy acquisition according to the CEM, is when a learner's interlanguage representation redundantly shapes the structure of the previous learnt language (Cabrelli, Flynn and Rothman, 2012). Thus, the CEM agrees that both L1 and L2 are principally available to the learners and each one can get a chance to be a source of transfer to the L3, but such a transfer can only materialise if it facilitates a subsequent acquisition, otherwise it remains neutral.

The CEM is a model which does not provide any privilege to any previous language. However, it does not propose that the principle conditions or variables for one system or both systems transfer positively to the L3. According to my view, the CEM model can be proven true depending on the study design. For example, in a design which includes L3 adult learners who are near native speakers in their L2, these learners cannot behave like their counterparts who are L3 learners and have not reached a native-like proficiency in their L2.

For the L1 absolute transfer model, the L1 should still be a privileged source of transfer on L3. The argument constituted within this model (see Garcia-Mayo and Rothman, 2012) is that the L1 sieves all types of transfer from other previously learned languages. The variable which is attributed to this model is the linguistic typology between the L1 and the subsequent languages. It is argued that if the underlying mental representation of the subsequent language is hypothesised to entail difficulties for learners, then the logic is that L1 is the major source of transfer despite the acquisition order between the L2 or the L3.

Contrary to the absolute L1 transfer is the absolute L2 transfer or L2 status factor model which was proposed by Bardel and Falk (2007) and Falk and Bardel (2011). According to this model, the L2 is hypothesized to be a privileged source of transfer during the acquisition of an L3 or any additional language. The L2 therefore acts as a filter of sorts for the L1 grammar. The L2 status factor model considers the results from several L3 studies which indicate that if the L3 learner had multiple previous languages, they should outperform the L2 learners. Furthermore, the L2 status factor has been attributed to the similarity between the L2 and L3 or L1 and L3, the higher metalinguistic awareness between a multilingual and a bilingual learner, and to the effect of recent learnt language (the recency or foreign language effect).

The fourth model is the typological primacy model (TPM) which is drawn from the studies by Rothman (2010; 2011; 2013). This model hypothesizes that transfer in L3 acquisition can come from the L1 or L2, or any previous language, provided that such a language is typologically similar or psychologically perceived like the L3. Results from Rothman (2010), for example, suggest that, apart from the typological constraints, no previous language has a privileged status to transfer to the L3. This is evident from the fact that L2 Spanish (and not L2 English) transferred its structure on L3 Brazilian Portuguese although the group pairing involved learners who had advanced level of proficiency in either L2 English or Spanish. Unlike the CEM, the TPM predicts the occurrence of both facilitative and non-facilitative transfer. In addition, Rothman (2013) in an articulated version of the TPM, proposes further that the transfer of the similar structures to an L3 is determined by unconscious cognitive processes based on the linguistic cues in the L3 input.

Generally, the views entailed in the above models come from different variables which are suggested as determining factors for transfer in L3 acquisition (see Cenoz (2001), Cabrelli and Iverson (2018) for discussions on variables). Apart from the typological relationship among

the languages in question, other factors are such as the recency factor (that a learner is expected to transfer more from the language they frequently use), the foreign language effect (that an L3 learner is expected to transfer from the language which is perceived closer to a foreign language being learned) and the L2 proficiency. Furthermore, the linguistic property (Mykhaylyk, Mitrofanova, Rodina, & Westergaard, 2015; Westergaard, Mitrofanova, Mykhaylyk, & Rodina, 2017), frequency and misleading input which are defined under the scalpel model (Slabakova, 2017), and the language of communication (Fallah, Jabbari and Fazilatfar, 2016; Jabbari, Bayle and Ablali, 2018) have also been proposed as determining factors for transfer in multilingual acquisition.

However, all of the variables just presented above have a direct link to linguistic or language factors. What remains unclear is whether the type of acquisition process can also be a determining factor for transfer facts in multilingual acquisition. In other words, it is predicted that instances such as non-facilitative transfer are sourced also from the type or the nature of the acquisition process. In this sense, if the L3 is learnt after a certain high level of proficiency in L2, it can be possible for that L2 to transfer positively to an L3. Generally, in the case of this study, where the L2 is learnt concurrently, although L2 learning started before the L3, no better proficiency was reached. So negative transfer is expected much more than positive transfer.

2.5 Other perspectives for interpreting multilingual acquisition

Multilingual acquisition is complex. It involves all matters related to the complex structures of all the languages in question, as well as the factors and effects of the interaction between those languages, the acquisition context and individual learner factors. Therefore, interpreting multilingual acquisition research results needs a broad perspective. In this regard, two other models were incorporated into the study for the purpose of the discussion and interpretation of the results. The first theory is the Dynamic Model of Multilingualism (DMM), proposed by

Herdina and Jessner (2000; 2002). The DMM is a theory which interprets multilingual competence as a system which is built by interconnected variables which affect one another and the system itself. According to DMM, multilingualism and multilingual acquisition form a dynamic system, this means they undergo changes overtime causing the acquisition process to follow a nonlinear developmental path which resembles a biological sine-curve (Herdina & Jessner, 2000).

The characteristics of the dynamic multilingual and multilingual acquisition systems which are proposed in the DMM, include: non-linearity, reversibility, instability, interdependency and complexity. Non-linearity involves improvement and restructuring processes in a multilingual learner interlanguage. The instability characteristic occurs when the language system ends in attrition. Reversibility involves the characteristics of the reverse growth, where the acquisition process gradually retards and finally causes system loss. Interdependency and complexity involve the interaction of all variables in shaping the behaviour of the multilingual system. In this regard, all languages involved in multilingual acquisition are expected to influence each other, to influence the interlanguage system and to be influenced by other factors related to the acquisition process.

Moreover, the DMM proposes a number of variables responsible for shaping the characteristics of a multilingual interlanguage. The proposed variables range from individual learner factors, and acquisition context to the acquisition process itself. These variables include: learner's attitude towards the languages involved, learner's energy and time invested in maintaining the learned language systems, learner's level of proficiency, the age at which a learner started learning the target languages, number of languages involved in the acquisition process, language acquisition context (formal or informal) and the time span over which the system is maintained (Herdina and Jessner, 2002).

Thus, the DMM assumption is that the multilingual learner is a bad language learner compared to those learners who acquire only one language. Moreover, language transfer is seen as a dynamic system which results from the cross-linguistic interaction among the languages involved. With the current study, it is therefore predicted that the L2 learners who only learn English as a foreign language will outperform their counterparts, the concurrent acquirers of both the L2 and L3. Any observation in the results which does not fit an interpretation within the framed theories, will be interpreted in terms of the DMM proposals.

The second theory is that of metalinguistic awareness. Metalinguistic awareness is the ability of an individual language learner to approach and solve types of linguistic problems which demand certain cognitive and linguistic skills (Jessner, 2006). Sometimes, metalinguistic awareness is used as a cover term for both language awareness – the ability to think about the nature and function of language – and linguistic awareness – linguistic skills and ability.

The metalinguistic awareness perspective assumes that a multilingual learner makes more use of this ability than an L2 or a monolingual learner. Metalinguistic awareness interprets the multilingual learner differently from the DMM. While the DMM predicts that a multilingual learner is expected to be a worse language learner, the metalinguistic awareness perspective predicts that the multilingual learner will be an experienced language learner; one who is able to solve linguistic challenges from previous language experience. In this study, if the multilingual learners outperform their counterparts, the results will be interpreted in terms of the metalinguistic awareness assumptions.

2.6 Concluding remarks and definitions of the key terms

This chapter has presented the theoretical frameworks underpinning this study. The current study is contextualized from a UG perspective and two other theories have been used to interpret the results. To conclude, UG and generative grammar, DMM, and metalinguistic

awareness are three different perspectives. UG is a formal theory which attempts to explain how learners acquire the grammar of their languages. But metalinguistic awareness is a cognitive theory which attempts to explain how a learner acquires language cognitively. As for the DMM, as it is named, it is a dynamic model which tries to explain how different factors (linguistics factors, cognitive factors, social factors, etc) work together to affect the process of acquiring language or multiple languages. However, this study is generally contextualized from a UG perspective as it looks on the acquisition of DPs and transfer effects which stem from the access to UG debate in L1 and L2 acquisition. In addition, the DMM and metalinguistic awareness theories, as noted earlier, were used in interpretation of the results. In the rest of this section a brief explanation of how some pertinent key terms are used in relation to the scope of this study is given. These include second language acquisition, language learning, multilingual acquisition, formal or instructional based learning, informal or non-instructional based learning, foreign language learning, second language and foreign language.

To start with, let us look at language acquisition versus language learning. The title of this study includes the phrase “multilingual acquisition” and not “multilingual learning”. Nonetheless, the terms “learner” and not “acquirer”, and “learning” rather than “acquisition” have been used throughout. The aim of this section is to go beyond Krashen’s (1982) definitions of language acquisition and learning.⁷ It is clear at this moment that the field of language acquisition has been extended from first language acquisition to second, third, fourth, and most recently, to multilingual acquisition. However, being clear about how the term “acquisition” is conceptualized in relation to the scope of this study is still crucial.

In this regard, this section makes it clear that the term “acquisition” in this study is conceptualised from SLA perspectives. By definition, SLA studies the way L2 learners create

⁷ Acquisition is a process which resembles the process children undergo while acquiring their first language.

a new linguistic system in a non-native language (Benati and Angelovska, 2017). Therefore, the use of the term “acquisition” here serves a role of describing the language produced by a non-native language learner and explaining why this output is the way it is (Metchell and Myles, 2004). Thus, SLA as a field of study enables any produced system (interlanguage) to be analysed and explained as a sign of a certain level of acquired form. For the scope of this study, I favour the term “interlanguage” for L2 learners’ production, which is viewed as a systematic language in its own (White, 2003). This is tantamount to saying that the acquired system is not necessarily correct.

Another key term which is seen necessary to define and differentiate it from other types of language acquisition is multilingual acquisition. By definition, multilingual acquisition is a process of acquiring, consecutively, a non-native language after the acquisition of another non-native language, or, simultaneously, more than one non-native languages (Cenoz, 2000). In this regard, multilingual acquisition is different from L2, L3 and even L4 acquisition. However, Parameters and scope which define a nascent field are hard to determine. Consequently, multilingual acquisition was not recognised as a field which stands on its own until recently. Now it can at least be differentiated from SLA. Formerly, a systematic distinction was not made between SLA, L3 or L4 language acquisition. Thus, any other language acquired after the L2 was not recognized as an independent field of research. Researchers in bilingual perspectives accounted and defined SLA as a cover term for any subsequent language acquisition irrespective of the type of learning context or the previously known languages (see Jessner, 2006: 13). This view was embraced in the “double monolingual hypothesis” perspective (Herdina & Jessner, 2002: 6; Bokamba, 2014: 22). With this hypothesis, early SLA researchers considered bilingual competence as two different language competences in one person.

However, multilingual acquisition is differentiated from SLA in many ways. The first difference is conceived in the perception that multilingual acquisition, especially in adulthood, is more complex than SLA. Its process involves more than two languages. Evidently, SLA is recognised as a complex process (Cenoz 2000: 41). However, adding another language can make the process even more complex although the process used to acquire an L2 can still seem alike to that used for an L3 (Cenoz, 2001:15). Secondly, SLA and multilingual acquisition processes are differentiated through their outer definitions. Multilingual acquisition is an acquisition of more than two languages (Cenoz & Jessner, 2000:39) after an individual has acquired his or her L1 and another non-native language. But SLA is an acquisition of a non-native language after L1 acquisition (Gass & Selinker, 2008). While SLA involves only two acquisition orders, multilingual acquisition can involve more than ten acquisition orders which are summarized below in Table 2.2.

Table 2.2 The difference between SLA and Multilingual Acquisition (Cenoz, 2000: 39)

Second Language Acquisition		Multilingual Acquisition	
1	L1/L2 (both languages at the same time)	1	L→L2→L3
2	L1→L2 (L2 after L1)	2	L1→L2/L3
		3	L1/L2→L3
		4	L1/L2/L3
		5	L1→L2→L3→L4
		6	L1→L2/L3→L4
		7	L1→L2→L3/L4
		8	L1→L2/L3/L4
		9	L1/L2→L3→L4
		10	L1/L2→L3/L4
		11	L1/L2/L3→L4
		12	L1/L2/L3/L4

Thirdly, a difference between SLA and multilingual acquisition is related to the concept of metalinguistic awareness (Jessner, 2006; 2008). According to Jessner (2006: 41), a language learner is meta-linguistically aware when he or she knows how to address and solve a problem which requires certain cognitive and linguistic skills. It therefore includes issues such as

advanced cognitive ability, higher learning strategies, previous language learning experience and greater metalinguistic knowledge about the languages in play. Therefore, a multilingual learner has a wealth of language skills and strategies which an L2 learner does not have (Gibson, Hufeisen & Libben, 2001: 145). Correspondingly, a typical adult L2 learner is reported to be different from a typical adult multilingual learner because the later will show a heightened metalinguistic awareness (Garcia-Mayo & Rothman, 2012). According to Jung-Ji (2013), multilingual acquisition involves a greater creativity, cognitive flexibility and more diversified mental abilities (Murphy, 2003: 11). In addition, an L3 learner who has acquired an L2 can be aware of the similarities between the languages involved (Bardel & Falk, 2012) and such a learner is also characterised as an experienced language learner (Cenoz, 2013: 4) who can be able to use knowledge from all languages involved and different strategies which an L2 learner does not. Therefore, these characteristics create a need to study the language behaviour of a polyglot (a multilingual) (Hammarberg, 2001).

Lastly, the difference between SLA and multilingual acquisition is that multilingual acquisition is a process which is characterised by complexities from systems which change overtime (Herdina & Jessner, 2000; 2002). Although, in SLA, the dynamic theorisation is also acknowledged (see, Verspoor, de Bot and Lowie, 2011; de Bot, Lowie, Thorne and Verspoor, 2013), in multilingual acquisition these dynamic characteristics, such as non-linearity, reversibility, stability, interdependence, complexity and change of quality (Herdina & Jessner, 2002:89) involve more than two languages. Therefore, multilingual acquisition characteristically can enhance or inhibit the acquisition process and eventually cause language attrition (Cenoz and Jessner, 2009).

While the distinctions between multilingual acquisition and SLA are clear, the line between multilingual acquisition and L3 acquisition or L4 acquisition is still vague. Most of the

multilingual acquisition studies have analysed the acquisition of an L3 as a cover term for multilingual acquisition. However, multilingual acquisition is broad. It can take the form of a consecutive or simultaneous process (Cenoz, 2000). Thus, multilingual acquisition is beyond being taken as a synonymous term for L3 or L4 acquisition.

According to Herdina and Jessner (2000), primary multilingual acquisition involves all acquisition processes of any acquisition after the acquisition of an L1 and an L2, while secondary multilingual acquisition involves the analysis of two or three non-native languages acquired concurrently after the acquisition of the L1 and/or L2. Moreover, if we can consider Cenoz (2000)'s multilingual acquisition orders (in Table 2.1), it can be concluded that L3 acquisition is one variety of multilingualism and it cannot be taken as a cover term for multilingual acquisition because multilingualism does not necessarily mean language acquisition (Cenoz, 2013:3). In conclusion, the process of multilingual acquisition can be a consecutive or simultaneous process. Therefore, researchers in this field should differentiate these two parameters to choose the methods and designs appropriate for one study and not for another.

Other terms pertinent to this study's scope are foreign language learning, formal language learning or instructional based against informal language learning or non-instructional language learning. The current participants are foreign language learners. Foreign language learning includes acquisition of a non-native language. It can be in a form of instructional based or non-instructional based. On the one hand, instruction based involves learning a language in a formal context (normally in classroom or school context). On the other hand, non-instructional based involves a naturalistic process. That is learning a language in a natural context or outside classroom or school context.

The last terms which should be clarified according to this scope are foreign language and second language especially in Tanzanian socialistic context. It should be noted though that a sociolinguistic perspective is beyond the scope of the current study. However, the concern of this definition is to clarify, firstly, the reason why the target languages in this study are characterised as both foreign and second or third language, respectively. Secondly, this subsection shows the extent to which these foreign languages exist side by side with other local languages in Tanzania and form a multilingual context which provides room for the current research.

Whether one can call English a second or a foreign language is still a fascinating debate in Tanzania. Different sociolinguists have been engaging in this debate. For example, according to Brock-Utne (2004), English is a foreign language in Tanzania because it is a language which is not of most indigenous people. As Rubagumya (1990:) notes, “English is not a language used by a bus conductor to communicate with his passengers; [it is] a language spoken outside one’s country and a language learned for communication with foreigners”. On the contrary, Lomax (1990) defines a second language as a language which is used widely by the community, but which is not the first language, and which is used as an official language in education, public administration, law and political activities. Furthermore, Lomax (1990) specifies different domains where English is used in Tanzania, including along shopping streets, on some notes and signs, used in some shops, mall, hotels and public offices and in daily newspapers. The situation has not remained the same since the 1990s however. Now English is used not only in official contexts but also in informal environments such as social networking, bongo flava music, barber and *mama n’tiliye* shop posters. The use of this language in mass media, such as TV, radios and newspapers, has also been extended since the 1990s.

Therefore, Lomax (1990) and Brock-Utne (2004) take a contradictory stand as to whether English in Tanzania is foreign and/or second language or both, because English is not a native language to Tanzanians, but it is used in official communication. Practically, English in Tanzania is used in different official contexts. In education, the language policy gives English the status of language of instruction and teaching from secondary school to higher learning levels. Furthermore, in primary school it is taught as a subject. English is recognised as an official language used in law and court, as well as in other government affairs. It is also a language of business, tourism and medical prescription.

Ochieng (2015) notes that the status of English to date is vitalizing in both formal and informal use compared to the status of Swahili. In addition, individual attitudes towards English have also changed from it being a foreign language, a language of educated people and/or a language of colonialists, to being a language which is important to be learned by anyone for national and international purposes (Senkoro, 2004).

From the above discussion, it is clear that the status of English in Tanzania is complicated and leads the language to be characterised as both a foreign and a second language. Therefore, for the purpose and the scope of the current study, English is taken as both foreign and second language. Specifically, English is considered a foreign language because its origin is from abroad, and a second language because the language policy has given it such a status and, in terms of the order of acquisition, it is acquired after Swahili which is a first and a mother language of many Tanzanians. French, on the other hand, is taken as a third language because it is acquired in close succession to English.

CHAPTER 3

THE STRUCTURE OF THE DETERMINER PHRASE IN SWAHILI, ENGLISH AND FRENCH

3.1 Introduction

The aim of this chapter is to discuss the cross-linguistic differences with regards to the DP structures of Swahili, English and French, respectively. This chapter creates a basis for understanding the DP-related parameter settings across the three languages. As noted earlier, Swahili is an article-less language and while English and French are both article languages, they sometimes vary in the way the D category is positioned with regard to the noun referent they modify. This chapter is structured as follows: in the next section (3.2) a characterisation of the DP structures of Swahili is given. Then, the English DP structure follows in section 3.3 while section 3.4 presents the French DP structure. The last section (3.5) concludes the chapter.

3.2 Swahili DP structure

Swahili does not include DPs which are headed by articles, since it is an article-less language. However, the D category in Swahili includes elements such as demonstratives: *huyu* (this), *hawa* (these) *yule* (that), *wale* (those), *hiki* (this-inanimate) *hivi* (these-inanimate) *vile* (those-inanimate); possessives: *wangu* (my-animate), *wetu* (our-animate), *wako* (your-animate), *wake* (his/her -animate), *wao* (their-animate), *changu* (my-inanimate), *chako* (your-inanimate), *chetu* (our-inanimate), *chake* (his/her-inanimate), *chao* (their-inanimate); numerals: *mmoja* (one-animate), *wawili* (two-animate), *watatu* (three-animate), *kimoja* (one-inanimate), *viwili* (two-inanimate), *vitatu* (three-inanimate), and so on; quantifiers: *kila* (every, each), *wote* (all).

As in article languages, determiners in Swahili determine the noun referent. In most cases and similar to other article-less languages, determiners in Swahili are positioned after the noun they modify (Rugemalira, 2007), as in the examples below.

- (3.1) *M-tu hu-yu ndiye ni-li-yemkuta ofisini.*
1-person this-1 is.the.one 1SG-PAST-meet in.the.office
 ‘This person is the one I met in the office’.
- (3.2) *M-tu m-moja ndiye ni-li-yemkuta ofisini.*
1-person 1-one is.the.one 1SG-PAST-meet in.the.office
 ‘I met one person in the office’.
- (3.3) *M-toto w-angu ndiye ni-li-yemkuta ofisini*
1-child 1-my is.the.one 1SG-PAST-meet in.the.office
 ‘The one I met in the office was my child’.

However, there are four points which are worthy to be noted concerning the distribution of determiners in Swahili. Firstly, determiners in Swahili can co-occur (Rugemalira, 2007; Kimambo, 2016). See examples in (3.4) and (3.5) below.

- (3.4) *M-toto w-angu m-moja.*
1-child 1-my 1-one
 ‘My child’
- (3.5) *Vi-atu vy-angu hi-vi*
8-shoes 8-my these-8
 ‘These are my shoes’/‘These shoes are mine’.

Secondly, unlike possessives which are only post-nominal determiners, demonstratives are freely positioned before or after the noun referent. The demonstratives which are pre-determiners are said to entail a function such as the one carried by English definite article (*the*), while the demonstratives, which are positioned post-nominally, are said to carry a function of demonstrating the noun (Kimambo, 2017; Rugemalira, 2007; Ashton, 1944; Carstens, 1991).

- (3.6) *M-toto hu-yu a-na akili.*
1-child 1-this 1SG-be intelligent.
 ‘This child is intelligent’.
- (3.7) *Hu-yu m-toto a-na akili*
1-this 1-child 1SG-be intelligent.
 ‘This child is intelligent’.

Thirdly, the universal quantifiers (those which are equivalent to English *all*, *every* and *each*) are also, and only, pre-nominally positioned.

- (3.8) *Kila m-toto a-na akili.*
every 1-child 1SG-be intelligent
 ‘Every child is intelligent.’

And not,

- (3.9) **M-toto kila a-na akili*
 ***1-child every 1SG-be intelligent**

Fourthly, when demonstrative and possessive determiners co-occur in the post-nominal position, the demonstrative follows the possessive (Rugemalira, 2007).

- (3.10) *M-toto w-angu hu-yu a-na akili.*
1-child 1-my 1-this 1SG-be intelligent.
 ‘This child of mine is intelligent.’

And not,

- (3.11) **M-toto hu-yu w-angu a-na akili*
 ***1-child 1-this 1-my 1SG -be intelligent**

The question which arises up to this point is whether the Swahili D category marks definiteness, and if yes, how. It should also be remembered at this point that we have argued in the previous section that article-less languages like Swahili do in fact mark definiteness. Therefore, in the following paragraphs, this discussion will be on the way definiteness is marked in Swahili.

Apart from overt definite articles, such as English *the* and French *le*, there is the concept of inherent definiteness. This means that there are inherent ways of marking definiteness in all languages. This inherent definiteness is marked through demonstratives, possessives, personal pronouns, proper nouns and universal quantifiers (Kimambo, 2016). Lyons (1977, cited in Kimambo 2016) says that these types of definite words are complex definites as they hold across all languages. Trenkic (2009) agrees that since most languages have possessive words, all languages can mark definiteness.

Specifically, Swahili marks definiteness in different ways such as with demonstratives, possessives, pronouns, bare NPs, subject markers and object markers (Kimambo, 2016). Regarding the scope of the current study, this discussion is narrowed only to two types. Firstly, Swahili definiteness is marked through the use of the pre-nominal demonstrative and possessives, as in examples (3.12) and (3.13) below.

- (3.12) *Hu-yu m-toto a-na akili.*
1-this 1-child 1SG-be intelligent
 ‘This child is intelligent.’

- (3.13) *Hi-vi vi-atu ni-li-vi-nunua PnP.*
this-2 2-shoe 1SG-PST-2-buy PnP.
 ‘I bought these shoes from PnP.’

In example (3.12), the demonstrative *huyu* (this) points to the definite (particular among others) noun, *mtoto* (child). Likewise, the demonstrative, *hivi* (these) in (3.13) points to a particular pair of shoes among other shoes. And the *wangu* (my-sing.) and *vyangu* (my-pl.) in the following examples do the same by pointing to the particular nouns *mtoto* and *viatu*.

- (3.14) *M-toto w-angu a-na akili*
1-child 1-my 1SG-be intelligent
 ‘My child is intelligent’

- (3.15) *Niletee vi-atu vy-angu*
 bring 2-shoe 2-my
 ‘Bring my shoes’

Secondly, definiteness in Swahili can be marked through bare NPs which are associated with second mention, general knowledge, familiarity, identifiability, uniqueness or post modified by a relative clause, in a given context of the discourse (Kimambo, 2016). However, both definite and indefinite nominal referents are bare NPs. Indefinite bare NPs are marked by general reference or when there is not any associative reference from the discourse. Below are some examples in which a bare NP is marked by a zero-article symbol, \emptyset .

- (3.16) *Sigara ni hatari kwa afya.*
 \emptyset 1-cigarettes are dangerous for life

‘Cigarettes (in general) are dangerous for health’

- (3.17) *Simba ni wanyama hatari.*
Ø8-Lions are animals dangerous
 ‘Lions (in general) are dangerous animals’

- (3.18) *Madirisha yanatakiwa yawe-wazi.*
Ø8-window should.be opened.
 ‘Windows (in general) should be opened’

- (3.19) *Lucia alinunua shati.*
 Lucia 3SG-PST-buy **Ø1-shirt**
 ‘Lucia bought a shirt (it is not familiar which particular shirt)’.

- (3.20) *Dunia ni duara*
Ø1-earth be round
 ‘The earth (uniquely) is round.’

- (3.21) *Tumeona wa-sichana ambao wanasoma uinjia.*
 we.have.seen **Ø8-girl** who study engineering
 ‘We have seen the girls who study engineering (post modified by a relative clause).’

- (3.22) *Fungua madirisha, nataka hewa.*
 open **Ø8-window**, need fresh-air.
 ‘Open the windows, I need fresh air’ (speaker and hearer are familiar with the window)

- (3.23) *AZAM walimzawadia m-shindi. M-shindi alifunga bao mbili.*
 Azam rewarded 1-winner. **Ø1-winner** scored two goal.
 ‘AZAM rewarded a winner. **The winner** scored two goals’ (second mention)

From the above examples, one can observe that definite and indefinite features in Swahili are also present with bare NPs. The first four examples contain indefinite nouns: *sigara*, *simba*, *madirisha* and *shati* which are indefinite referents due to the lack of contextual evidence for particularity in the discourse. On the other hand, the last four sentences contain bare NPs which are definite referents by either the modification of the relative clause, the uniqueness of the noun, the familiarity of the noun to both speaker and hearer or by second mention. In the following paragraphs, the discussion of the structure of Swahili DPs looks at number marking.

Another aspect which is important to include in this discussion is the Swahili number marking feature. Unlike English and French where number realization can also be marked syntactically

on the D element, number marking in Swahili is done through overt morphological affixes which are attached to the noun itself, to the associated verbs in a clause, to the modifiers or to the demonstratives and other determiner elements. Below, in table 3.1, examples of number affixes in Swahili are presented. These affixes are also the morphological noun class markers (Rugemalira, 2007, Carstens, 1991). However, for the purpose of the current study, they are analysed here only as number marking affixes.

In this table (3.1), the bolded parts of the words are the number affixes in their singular and plural forms. The gloss of the words is given in English under each respective word. These affixes are in most cases prefixed before the base of the word, except in the case of demonstratives where they can be prefixed to the distal or suffixed to the proximate base of a demonstrative word.

Table 3.1: Number Morphological Affixes in Swahili

Number Affixes on Bare NPs		Number Affixes on D Category		Number Affixes on Verbs	
Singular	plural	Singular	Plural	Singular	Plural
<i>m-tu</i> 1-person	<i>wa-tu</i> 2-people	<i>hu-yu</i> this-SG 'this'	<i>ha-wa</i> this-PL 'these'	<i>a-mekuja</i> (1-person- has come)	<i>wa-mekuja</i> (people-have come)
<i>m-toto</i> 1-child)	<i>wa-toto</i> 2-child	<i>yu-le</i> SG-that 'that'	<i>wa-le</i> PL-that 'those'	<i>a-litueleza</i> (child-told us)	<i>wa-litueza</i> (children- told us)
<i>ki-ti</i> 1-chair	<i>vi-ti</i> 8-chairs	<i>ki-le</i> SG-that) 'that'	<i>vi-le</i> PL-that 'those'	<i>ki-mevunjika</i> (chair-has broken)	<i>vi-mevunjika</i> (chairs-have broken)
<i>-chupa</i> bottle	<i>-chupa</i> bottles	<i>hi-i</i> this-SG 'this'	<i>hi-zi</i> this-PL 'these'	<i>i-mevunjika</i> 'bottle-has broken'	<i>zi-mevunjika</i> 'bottles-have broken'
<i>-maji</i> water	<i>-maji</i> water	<i>ya-le</i> NC- <i>that</i> 'that'	<i>ya-le</i> NC-that 'that'	<i>ya-mejaa</i> 'water is full'	<i>ya-mejaa</i> 'water is full'

*NC = Non-Count

In this section, the nature of DPs in Swahili has been discussed. In the following section, the English DP system is presented.

3.3 English DP structure

In English, the DP can be headed by articles (*a, the* and the zero article), possessives (*my, your, his/her, their*) and demonstratives (*this, that, these, those*), and other forms such as multipliers, intensifiers, fractions, distributives, ordinal and cardinal determiners (Lyons, 1999; Hawkins, 2001). Regarding the scope of this study, only DPs headed by articles will be focussed on in this section. English has three article forms, *the, a*, and zero article, represented in this study as, \emptyset . Their uses range from morphological to functional (indicating the syntactic, semantic, and pragmatic relations with the noun with which they occur).

Morphologically, the definite article *the* can occur with both singular and plural nouns. When such nouns start with a consonant, the article is realised phonologically as [ðə], while before nouns starting with a vowel, it is phonologically realised as [ði]. The indefinite article *a* [ə] can only occur with singular count nouns starting with a consonant, while singular count nouns which start with a vowel are preceded by the *an* [ən] form of the indefinite article.

Regarding the functional (semantic) account, the focus is on the (in)definiteness and specificity functions of these article forms. To make it clearer, (in)definiteness, as used in this study, is an inclusive term which distinguishes between definite and indefinite articles. Specificity on the other hand, distinguishes between specific and non-specific reference. English articles are either definite or indefinite. A noun in English is definite if it is familiar to both speaker and listener (familiarity). Familiarity is a definite feature which is created either by second mention of such an entity in the discourse, post modification or general knowledge from the context of interaction (Kimambo, 2016). The noun can also be definite if it is identifiable by the hearer in

the context of interaction (Lyons, 1999) or if it is unique (uniqueness) in the sense of being the only one in the context of speaker-hearer knowledge.

Therefore, *the* is a definite article which describes a noun as being a particular, specific, familiar (known) or identifiable entity in the context of speaker-hearer interaction. On the contrary, *a*, *an*, and \emptyset are indefinite articles which describe a noun as an entity which is still unknown, especially in the context of the hearer knowledge. According to Lyons (1999), the indefiniteness is marked for a noun of which both speaker and hearer have no particular knowledge, or a speaker is aware but not a hearer, or such a noun contains a general meaning (not pointing to a particular entity) or lacks some description which can make it more familiar in the context. The examples (adapted from Hawkins, 2001: 232-233) below illustrate the explanations given above.

The use of a definite article (*the*).

- (3.24) a. I saw *the rabbit* (definite, singular noun)
 b. I saw *the rabbits* (definite plural noun)
 c. She presented *the evidence* (definite mass noun)
 d. *The understanding* they reached was short lived (definite abstract noun)

The use of indefinite article (*a*, *an*).

- (3.25) a. I saw *a rabbit* (indefinite singular noun)
 b. They reached *an understanding* (indefinite abstract noun)

The use of zero article (\emptyset).

- (3.26) a. I saw \emptyset *rabbits* in the garden (indefinite plural noun)
 b. She does not eat \emptyset *rabbit* (indefinite singular noun-general meaning)
 c. She presented \emptyset *evidence* for her claim (indefinite mass noun)
 d. The situation calls for \emptyset *understanding* (indefinite abstract noun)

In the paragraphs above the definiteness (definite versus indefinite) function of English articles was discussed. In this paragraph, the discussion turns to the specificity (specific versus non-specific noun) function, specifically of English articles. English has no overt morphological or

syntactic markers for specificity. However, specificity in English depends on an interpretation given to an article plus a noun with which the article occurs. In the following paragraph, the discussion is turned to the formal structure of English DPs headed by articles.

English Ds are pre-nominal elements. As the D category generally can be occupied by different determiner types, there is a formal order in the co-occurrence of articles and other determiner types. In brief, while articles can co-occur with other determiner types such as ordinals, cardinals, multipliers, intensifiers, quantifiers, and so on, they cannot co-occur with demonstratives and possessive determiners. See the examples below in (3.27) and (3.28).

- (3.27) a. *The first boy* in the line (*the* with ordinal determiner)
 b. *The two boys* in the line (*the* with cardinal determiner)
 c. *All the boys* in the line (*the* with distributive determiner)

- (3.28) a. **The my boy* in the line (False form, *the* with possessive)
 b. **The those boys* in the line (False form, *the* with demonstrative)

In fact, articles cannot stack with demonstratives and possessives since they all occupy the same position and are sometimes characterised as central determiners as they can occur between other determiner types (Kimambo, 2016). After having presented the English DP structure in this subsection and discussed the form and function of English articles, in the following subsection, the DP structure in French is presented before a concluding subsection on the DP parameter settings of the three languages.

3.4 French DP structure

Unlike English and Swahili, French restricts determiner-less NPs (in other words, bare objects and subjects). Exceptions are observed in a few cases such as in the use of proper nouns, in idioms like *avoir faim* (feel/have hunger), *faire attention* (pay attention); in vocative forms like *imbécile!* (idiot) and in defining a subject as a member of class, as in *Pierre est avocat* (Peter is a lawyer) (Prévost, 2009; Granfeldt, 2000: 265).

Moreover, determiner elements in French are not different from those of English. Determiner types range from numerals *un*, (one) *deux* (two); quantifiers *plusieurs* (several); articles *le*, *la*, *les* (the) and *un*, *une*, *des* (a), possessives *mon*, *ma*, *mes* (my); *ton*, *ta*, *tes* (your), *son*, *sa*, *ses* (his, her); *votre*, *vos* (your-for many possessors) and *leur* (their); demonstratives *ce* *cette*, *ces* (this, those). However, this section will focus only on determiner phrases headed by articles. Articles in French are the only determiners which mark the definiteness function with nouns (Prévost, 2009).

Definiteness interpretation in French is not different from that of English. Therefore, the French determiner, *le* (the), refers to the entities known to the listener, through generic knowledge or by second mentioning in the course of interaction. The indefinite article, *un* (a), points to the entities which are unknown to the listener, because of being non-generic or having just been mentioned for the first time in the discourse.

In addition to marking the nominal gender features, French articles overtly mark the plural forms of the noun they accompany. Therefore, while the definite article form, *le* (masculine) and *la* (feminine) are the singular forms, their plural form is *les* (the-plural). The plural form for the indefinite articles, *un* (masculine) and *une* (feminine), is *des* (some). There is another type of article which is classified as a partitive article, *du* (masculine), *de la* (feminine), *des* (plural), which is often used with uncountable nouns like *water*, *milk*, *salt*, *sugar*, as an equivalent to the English form in *some water*, *some milk*. But these French *some*-forms were not included in the scope of the current study. Therefore, they are not focussed on in this section.

Like English, French does not overtly mark specificity. Therefore, an NP can be referred to as specific due to the combined speaker-listener knowledge, in the given interactive context (Prevost, 2009). Thus, the French definite article forms point to the specific noun while the

indefinite ones point to the non-specific nouns. There are also instances where the definite article points to non-specific generic nouns and the indefinite articles pick out the specific nouns which are specific entities in the context of speaker's knowledge. This complex relationship between form and function of definite and indefinite article use has already been discussed in detail in the previous section.

Regarding the formal structure of French DPs, all determiners are pre-nominally positioned (Granfeldt, 2000). Moreover, articles *un, le, des, les*, demonstratives *ce, ces* and possessives *mon, ton, son, notre, votre, mes, tes, ses, nos* and *vos* cannot stack together. However, they can co-occur with other types of determiners as in English.

According to Prévost (2009), each type of determiner in French entails a different position in the DP formal representation. In this regard, the definite and indefinite articles are the primary DP heads while the possessive and demonstratives, as well as other types of determiners, occupy different positions and involve some movement to D position.

3.5 Conclusion: differences between Swahili, English and French DPs

Concluding the DP structure issues, the parametric differences between Swahili, English and French DP structures, and their article systems in general, are presented in this subsection. To begin with, English and French are both article-languages, while Swahili is not. Contrary to English, French nominal number is overtly marked on articles and other determiner elements (Prévost, 2009). In English, number is overtly marked through affixes attached to nouns or verbs, although article forms accompany either singular or plural nouns.

Regarding definiteness, English assigns nominal definiteness features through articles, demonstratives and other D types, while French uses definite and indefinite articles only. Swahili on the other hand has no article system, but it is said to mark definiteness through

demonstratives. Another significant parametric difference resides in the DP structures of the three languages.

While English and French determiners are pre-nominally positioned, Swahili allows post-nominal structures which in most cases involve movement to the left of the NP (Ndomba 2017). Moreover, both English and Swahili allow surface bare NPs⁸, with bare NPs being common in Swahili. On the contrary, French is more restrictive with bare NPs. In French, nouns must be modified by a determiner of some kind, with a few exceptions. These DP parametric differences are summarised below in table 3.2.

Table 3.2: Swahili, English and French DP Parameters

Features	Structure	Swahili	English	French
Articles	1. Presence of overt article system	No	Yes	Yes
	2. Nominal number marking on articles	No	No	Yes
Definiteness	1. Marked through articles	No	Yes	Yes
	2. Marked through other determiners	Yes	Yes	No
Specificity	Contextually determined	Yes	Yes	Yes
DP Structure	1. DP headed by articles	No	Yes	Yes
	2. Allows post-head determinant	Yes	No	No
	3. Allows bare NPs	Yes	Yes	No

⁸ Surface because the zero article, or null determiner, has no phonological form.

CHAPTER 4

LITERATURE REVIEW

4.1 Introduction

This chapter is concerned with a review of the design and methods used in multilingual acquisition and previous empirical studies which test the FH in L2 and the L3 acquisition models and those studies which are related on the acquisition of DPs, especially those headed by articles. Briefly, section 4.2 gives a review of the methods and design which have been used in multilingual acquisition studies from a generative perspective. Section 4.3 follows by reviewing the studies which tested the FH. The empirical studies which tested the multilingual acquisition models based on previous language transfer on subsequent language are reviewed in section 4.4. Then, empirical studies which are related to the current study are presented in section 4.5. These include studies on DPs headed by articles, number marking, and studies done in Tanzanian contexts. Finally, section 4.6 concludes the chapter and highlights the originality of the current study.

4.2 Research design and methods in multilingual acquisition research

Discussions of research designs and methods suitable for multilingual acquisition analysis are without end. This is due to the fact that multilingual acquisition is surrounded by numerous complex issues (Cabrelli, Flynn and Rothman, 2012) which can be studied from different perspectives and featuring different variables. For some researchers, the major variable is the order of acquisition; hence multilingual acquisition can be studied using any language learned after the acquisition of at least two languages. While for others, learners' proficiency in previous languages is a defining variable for multilingual acquisition (Rothman, Cabrelli and De Bot, 2013). In the following paragraphs, a review of three issues which have been challenged in multilingual acquisition methodology is given.

Firstly, the mirror-image method has become the norm in studying multilingual acquisition. This method compares results between two or more groups. However, comparing native speakers to non-native L3 speakers has been termed as a simplistic design and a comparative fallacy (Cenoz, 2013). This comparison is challenged for its deficiency in determining the presupposed complex nature of interacting factors from the multilingual acquisition process and the languages involved.

Secondly, recruiting only an L3 group in the name of multilingual acquisition is also challenged in number of ways. According to Cenoz (2013), such a design investigates only a single linguistic system and lacks a holistic nature. Thus, it cannot account for multilingual acquisition issues such as interaction and reverse transfer among the language systems at play (Herdina & Jessner, 2000; Cenoz, 2001; Flynn, 2009; Kullundary & Gabrielle, 2012). In addition, it limits itself to the instance of consecutive multilingual acquisition of a third or any other additional language after the acquisition of a native and another non-native language. Therefore, there is no difference from the traditional approach to SLA for two reasons. Firstly, it uses native speakers as a reference. Secondly, it looks only at one language. Therefore, it approaches a monolingual rather than a multilingual system (Cenoz, 2013). In this study, it is identified as an L3 only design as it looks only at an L3 interlanguage.

Thirdly, the concept of who a multilingual learner is has been argued for. Cabrelli, Flynn and Rothman (2012), for example, question if a multilingual learner is the one who learns an L3 after he or she has learned a L1 or L2, would an adult who has two languages beyond his or her L1 to a level of high proficiency and sequentially learns an L4 be methodically analysed as a multilingual, third, fourth, bilingual or multiple language learner?

Consequently, different proposals for a mirror-image method and designs which can elucidate the insights held in multilingual acquisition have been given. Cabrelli, Flynn and Rothman

(2012) propose a design which focuses on internal measures of comparison. Their argument is, if we are looking at transfer effects from previous languages known by a learner, we need to know the actual competence the L3 subjects have for the same properties in their L1 or L2 under investigation in the L3 study. By so doing, we can argue that the L3 performance derives from L2.

In the same line, Cenoz (2013) proposes a focus on multilingualism approach. To her, this is a holistic approach for studying multilingual acquisition and multilingualism. A focus on multilingualism approach is characterised by three factors. Firstly, it is centred on a multilingual speaker. As such, it is not a good idea to compare a multilingual speaker to several monolinguals because multilingual competence is different from other types of competences. Cenoz (2013) argues that the difference is not only in what they do (the type of language they produce), but also in how they do it (the multilingual acquisition process). Secondly, the focus on multilingualism approach centres the analysis on the whole linguistic repertoire in the multilingual mind. According to Cenoz (2013), when we look at the whole linguistic system of the multilingual learner, we see not just one part of the picture, but the whole picture of the interaction among languages involved. In addition, interaction between languages can be seen when performances in the languages involved are correlated.

Finally, in the Dynamic Model of Multilingualism (DMM) (a model which theorises multilingual acquisition as a process involving interconnected systems) view, multilingual acquisition studies should analyse multilingual interlanguage as a dynamic system (Herdina and Jessner, 2000; 2002). This also means looking at a multilingual system as a whole rather than the isolated development of a single system. According to the DMM, variables which determine the multilingual acquisition should be taken as interconnected systems which affect one another.

In conclusion, multilingual acquisition is complex and broad. Its methods and designs are not necessarily uniform. The designs and methods are usually challenged and invite gaps for further studies. Any method and design of multilingual acquisition research depends on the aim and the questions which need to be answered. However, the holistic design perspective compares not only multilingual and monolingual or bilingual systems. It considers the whole linguistic system present in the same multilingual speaker. In the rest of this discussion, the studies which reached their conclusions by comparing L3 learners to native or L2 learners are reviewed as L3 only designs, while studies which analysed both L2 and L3 systems of a multilingual learner, or involved more than one independent variable, are termed holistic designs.

4.2.1 Empirical studies using an L3 only design

In this subsection, previous empirical studies which examined only an L3 as a cover term for multilingual acquisition are reviewed. These are termed L3 only design studies. To start with, Jaensch (2009) examined the role of L2 proficiency in the L3 transfer of Determiner Phrases. She compared 41 Japanese speakers who learn L2 English and L3 German with 8 German native speakers control group. The main question which was addressed by this study was whether the L3 learners with different proficiency in L2 will reveal the same characteristics in the L3 DP production. In this study the L3 group did the tasks in L3 German only and their L2 proficiency was measured with the Oxford quick placement English test. All tasks were done in a single sitting.

With this design, only the L3 DP system was analysed. According to the holistic design view, this design is simplistic or no different to the monolingual acquisition design (Cabrelli, Flynn and Rothman, 2012). However, this design aimed at discovering the effect of L2 proficiency on the L3 German acquisition of DPs. So, it was not important to test the same feature in both

L2 and L3. Instead, the proficiency test in L2 English and the control group results were taken as an important baseline for the results in the L3 German group.

In the same year, Flynn (2009) examined two groups, L1 Kazakh-L2 Russian-L3 English and L1 Japanese-L2 English groups. The aim of the study was to answer three questions: 1. Do the properties of L1 grammar alone determine the L3 development? 2. Can grammatical properties of all previous languages potentially determine subsequent patterns? 3. What do these results inform about the nature of the initial state for the L3 language learning? The study looked at the acquisition of relative clauses in both L2 and L3 English by learners whose L1s are typologically closer to each other. The hypothesis was that since Kazakh is similar to Japanese, and if L1 plays a role in L3 acquisition, then the L2 English group will behave the same as L3 English group. This hypothesis was not supported because the results from the L3 English group did not match the results from the L2 group. Thus, it was the L2 interlanguage which was revealed to play a role in L3 acquisition.

In fact, this design, which compares results from two groups which are defined by the same L1s, is crucial for showing which language, between the L1 or the L2, influences the acquisition of the L3. However, it is still not holistic because it leads to the analysis of the comparison between two different monolingual systems. If one group is L1 speakers who learn an L2 and an L3, and the other group is L1 speakers who only learn an L2, a comparison between these groups is not enough to conclude that L2 interlanguage plays a role in L3 development, if the L2 system of the L3 group is not also analysed and compared to the L2 group. However, a design like that of Berkes and Flynn (2012), which compared groups which speak different L1s, but the L2 of the second group is the L1 of the first group, can be a supportive design for an argument that it is the L2 and not the L1 which plays a significant role in L3 development. Berkes and Flynn's (2012) design is discussed in the following paragraph.

Berkes and Flynn (2012) compared two groups, 42 German speaking learners of L2 English and the second group consisted of 36 L1 Hungarians who were L2 German and L3 English learners. With this design, a notable point is that the L1 of the L2 English group was the L2 of the L3 English group. However, Berkes and Flynn's (2012) design is still not holistic because the L2 English system and the L3 English systems are not the linguistic repertoire of the same learner. If we consider the characteristics of the L2 and the L3 groups, we can agree that the L2 English groups are the native speakers of German while the L3 English groups are the interlanguage speakers of the L2 German. Thus, the L2 English system cannot be part of the holistic system of such a multilingual learner, because the way German as a native language can influence the L2 English, is different from the way German as an L2 can influence the L3 English.

Footen (2009), in turn, examined four groups to discover the role of language typology or similarity between L2 and L3 in the acquisition of the contrast between aspectual meaning in Romance languages. The groups were 34 control group native speakers of Romance, 25 L1 English speakers who learned L2 Romance, 14 L1 native speakers of English who learned L3 Romance and has learned another Romance language as an L2 and 12 L2 native speakers of Romance who learned another L3 Romance and studied English as L2. The study sought to address the questions whether the L3 (Romance language) learners who have L2 English and L1 (Romance language) transfer aspectual meaning contrasts to L3 from L2 or L1. The Romance languages were French, Spanish and Italian. The instruments were morphology tests in all Romance languages, where L2 and L3 Romance learners did the test in their respective languages. The native speaker control groups also each did a test in their respective language. The tests were in the form of a sentence conjugation judgement task.

Although results from this study supported the pre-set prediction, it still seems like a monolingual design rather than a multilingual holistic design, because the L2 system of the L3 group was not analysed, but the conclusion was made from the comparison between the two L3 groups: the L1 Romance, L2 English and L3 Romance group and the L1 English, L2 Romance and L3 Romance group. With this design only the L3 systems are analysed and compared to the control groups, who are native speakers.

Another study which is reviewed as an L3 only design is that of Jin (2009) who compared 40 L1 Chinese-L2 English-L3 Norwegian and 14 native Norwegian speakers as a control group. All participants were graduate students at the Norwegian University of Science and Technology. They were exposed to Norwegian through both formal and naturalistic settings. Since Norwegian is closer to English than Chinese, it was hypothesized that L2 English will be more influential than L1 Chinese. The study tools were the grammatical judgement and sentence correction tasks in both Norwegian and English.

Although Jin's (2009) study aimed at examining the grammatical object, similar to Foote (2009), results from this design are different from the results found in Foote (2009). In Jin's (2009) study, L3 group results show that they rejected English null object sentences 72% of the time. Individual results revealed that most of the learners performed like Norwegian natives. There was insignificant transfer from L2 interlanguage. The author interpreted this evidence as the indication of parameter resetting and concluded that L1 influence to L3 acquisition cannot be eliminated as a direct source of transfer on L3 acquisition, even after learners have previously acquired a typologically closer L2.

However, the results from Jin's (2009) study may also have been affected by the acquisition setting. The participants in this study had the chance to learn the L3 both formally and informally, something which has not been considered in the interpretation of the results. If the

author had considered the holistic characterisation of the multilingual system, she could have interpreted the results from the point of the informal learning opportunities that could have provided the learners with a stability factor for maintaining the L3 system (see Herdina & Jessner, 2002). Therefore, the author should have noted that the L3 learner who has the chance to learn the language in formal and informal contexts will have more time for maintaining the language than the one who encounters the language in the classroom only. Furthermore, the analysis of the L3 group should include the L2. In the following subsection, this discussion is turned to the review of previous studies which attempt to analyse both the L2 and L3 of the multilingual learner. This type of design is a holistic (Herdina and Jessner, 2000 and 2002; Cenoz, 2001).

4.2.2 Empirical studies using a holistic design

Among other studies using holistic design, Hsien-jen Chin's (2009) participants were Chinese native speakers who had learned L2 English and were learning L3 Spanish. They were sampled into three subgroups: 32 college students taking an intermediate Spanish course intensive programme in Taiwan who are L1 Chinese, L2 English and L3 Spanish; 11 English native speakers and 11 Spanish native speakers. This researcher wanted to address the question of which language, between the L1 and L2, will transfer to the L3. The study looked at the acquisition of the perfective and imperfective distinction. From an L2 perspective, learners are said to transfer L1 knowledge to the recognition of L2 semantic contrast between perfective and imperfective verbal forms. So, this author wanted to trace if this contrast extends to the L3 and if yes, from which language. The hypothesis was that if the L1 is the source for transfer, it will transfer to both L2 and L3. But if not, the L2 interlanguage will reveal transfer to the L3.

This study used two test versions: one in English and the other in Spanish. The L3 group did both tests while the L1 groups each did one in their language. The tests were both piloted with

native speakers to ensure consensus on the answers and that there was no ambiguity in the test items. The author recommends that this design, which seeks to explore learners' behaviour in both L2 and L3, is an important design for revealing the effect of the previous languages.

From the results, the L2 interlanguage was seen to be the main source of transfer to the L3. The L3 average scores on the Spanish morphology test were close to that of the English test. The author suggests that this evidence reveals that learners are in the process of acquiring the tense-aspect feature in Spanish. Although this design used native speakers as a control group for the L3 and L2 results, a comparison which some scholars such as Cenoz (2013) challenge as a comparative fallacy, the comparison between the learners' L2 and L3 suggests a holistic perspective which is different from the usual perspective of viewing only the L3 system. The same design was used by Kulundary and Gabriele (2012).

Kulundary and Gabriele (2012) studied the L3 acquisition of relative clauses by L3 English learners who are L1 speakers of Tuvan (a Turkic language spoken in Russia, Mongolia and China) and are at different levels of development in L2 Russian. The study analysed both L2 Russian and L3 English to compare the performances between the two languages. Therefore, the study used two groups distributed in the following two categories: L2 group: L1 Russian-L2 English; L3 group: L1 Tuvan-L2 Russian-L3 English. The L2 group were L1 Russian speakers who had no knowledge of Tuvan. This group was used as a control group because the similarity between the L2 group and the L3 group would suggest that L3 acquisition is not influenced by L1 Tuvan, but rather by the L2 Russian. The L3 group was recruited from a high school and a university.

The research tools were listening and written comprehension tests in both Russian and English. While the L2 group only did the L2 English test, the L3 group did both versions. The two versions were formulated similarly to be able to compare the performance in the two languages.

Both the English and the Russian tests were piloted with groups of monolingual native speakers to ensure that they tested the expected responses. Results showed that L3 acquisition is influenced mostly by the L2; the same evidence revealed in Hsien-jen Chin (2009). The path of development (the acquisition order) was also revealed to be the same in both L2 and L3.

However, there is one observation with Kulundary and Gabriele's (2012) design. The L2 and the L3 group have different L1 characteristics; the L1 Russian for L2 group and L1 Tuvan for the L3 group who have studied Russian as L2. The results from this design suggests that it is L2 (Russian in this case) which affects L3 acquisition rather than L1 because there was the similarity between L2 and L3 English results. But, the influence of L1 Russian on L2 English cannot be the same as the influence of L2 Russian on L3 English because Russian is not typologically related to English.

On the other hand, Dewaele's (2012) design seems also to cover the holistic analysis of the multilingual system because it involved a variety of independent variables. In this study, Dewaele attempted to investigate the role of different independent variables, such as monolingual versus multilingual schooling, age of onset of acquisition, total language knowledge, language attitudes and authentic language use, in inter-individual self-perceived proficiency (SPP) by 122 Galician students who learned Spanish, English and French. SPP is a person's evaluation of the ability to communicate (Dewaele, 2012: 226). He observed the learners self-rating in all four language skills: listening, reading, writing and speaking. The languages in questions were two local languages and two foreign languages.

Dewaele sought to answer the question of how learners rate in speaking, writing, listening and reading in the languages they learn. The hypotheses were that participants knowing more languages would feel more proficient in all languages, and participants with more languages would reveal positive attitudes towards the languages and would rate their proficiency higher

in those languages. Results show that SPP is linked not only to the numbers of languages participants know or the level of proficiency a participant has, but to other different independent variables, such as individual differences like the onset age of acquisition.

Moreover, Cenoz (2001) used a holistic design in answering questions concerning the role of linguistic distance, L2 status and age on cross-linguistic influence by L3 English learners, who are speakers of Basque and Spanish in a Basque school. Cenoz addressed the following questions: Is cross-linguistic influence affected by age? Does cross-linguistic influence affect content and functions? How are terms taken from Basque and Spanish into English? To answer these questions, the author used 90 elementary and secondary school students who have Basque and Spanish as their L1s. They all lived in Basque country, Spain. Basque L1s were 44%, Spanish L1s were 23% and Basque and Spanish L1s were 32%. Basque in this context is a language of instruction while Spanish and English are learned as subjects. All the participants completed a background questionnaire which included the questions on the knowledge and use of Basque in their social networks. The study asked all the students to tell the wordless story, “Frog, where are you?”, which has 24 pictures. The procedure involved telling a story individually to a native English speaker, where all stories were audio and video taped and transcribed. All cases of cross-linguistic influences at the lexical level were identified. Such instances included the direct or indirect appeal to the interlocutor to get help to produce a correct term in a target language, codeswitching, borrowing, and foreignizing—use of a foreign word with morphological or phonological adaptation.

Results show that cross-linguistic influence in L3 acquisition is not only related to linguistic distance, but also to other factors. Age was revealed to be a factor, since older learners revealed more linguistic influence than their younger counterparts. Another factor was proficiency. The lower proficiency group were revealed not to be influenced cross-linguistically, unlike the

higher proficiency learners. The author speculates that maybe it is because their proficiency was still quite limited. However, linguistic proximity and foreign language effect were supported. Learners showed a tendency to transfer Spanish terminologies (an Indo-European language) to English rather than from Basque (a non-European language).

The last study in this discussion is that of Gibson, Hufeisen and Libben (2001). These authors studied the production of L3 German prepositional verbs by learners who have different L2s. The study originated from the idea that L3 learners behave differently from L2 learners because L3 learners can bring their wealth of knowledge and strategies, which a learner of an L2 does not have. Also, these learners are predicted to possess language experience and greater metalinguistic awareness of how languages are structured. Therefore, this study addressed three main questions. Firstly, does having an L2 hinder or help in the production of L3 German? This question sought to understand if learners who have studied another L2 foreign language will advantageously outperform the ones who learn German as their first foreign language. The second question was, does having an L1 similar to the L3 hinder or help in the production of both L2 and L3? Finally, the third question was, does having an L2 similar to the L3 help or hinder L3 production?

This study used 64 adult participants, men and women who are all learners of German as a foreign language and who have different L2 foreign languages. The task was a cloze test task of 33 German prepositional verbs. Results revealed that most of the participants did very well in the task and L3 learners with another L2 foreign language did not outperform those learners with only L2 foreign language. So, having many linguistic systems was shown to be an interference to the L3 acquisition, something which the authors clarified as “cumulative confusion effect” (Gibson, Hufeisen and Libben, 2001: 153) or, on my view, as foreign

language confusion. Moreover, no difference was revealed in having an L1 which is like the L3. Also, linguistic proximity between L2 and L3 did not have an effect in this study.

In conclusion, multilingual acquisition can be analysed from any design or perspective according to the objectives and research questions which a researcher needs to address and answer. The research agenda regarding the influence of the previous known languages on the acquisition of a third or any additional language is determined by different parameters or independent variables ranging from individual variables, such as age, language attitude, self-motivation, individual learning strategies; to social variables, such as language status, formal and informal learning contexts; and language variables, such as number of languages known by a learner, second language proficiency, typological similarity between previous languages and subsequent language, recently learned language and second language status.

The holistic design proposes a focus on multilingualism, a perspective which analyses the entire linguistic system of a multilingual learner. With such a design, one can cover a range of variables which encompass not only the influence of previous known languages on subsequent languages, but also the influence of the subsequent language on the previous learned languages, as well as the interaction of the process itself.

More recently, Matthiew, Cheung and Tsang (2014), Tsang (2015) and Llinàs-Grau and Puig-Mayenco (2016), which aim to examine bidirectional or regressive transfer (mutual transfer on each other), also use a holistic design. Matthiew, Cheung and Tsang (2014) looked at tense and aspect in L3 French and later Tsang (2015) examined number agreement in the same target language. The design of these two studies involves a comparison between L1 Cantonese learners of L2 English (the control group) and L1 Cantonese learners of L2 English, L3 French (the experimental group). In the results, the L2 English interlanguage of the experimental group diverged from the L2 English interlanguage of the control group. Llinàs-Grau and Puig-

Mayenco (2016) went further to experiment with L1 Catalan or Spanish learners of L4 German, L3 English. This experimental group was compared with a control group who were L1 Catalan or Spanish speakers and L3 English speakers. This study looked at the L3 English *that*-deletion. Results revealed that the learners with L4 German deleted *that* feature in their L3 English more often than their counterparts.

Likewise, the current study follows a holistic perspective. The design of the current study analyses both the L2 and L3 of the same learners. In addition, an L2 group is used as a control group which can verify the L2 linguistic nature of the multilingual acquirer group. Both groups are from the same linguistic background. The comparison is therefore not between monolinguals and multilinguals, but between learners who learn the L2 and those who learn both the L2 and the L3; first in L2 DP production and between L2 and L3 DP production. In section 2.4, the multilingual acquisition research trends are presented before the review of previous related studies.

4.3 Empirical studies which tested the Fluctuation Hypothesis

The agenda in testing the FH has been linked to other variables which might be interacting with or regulating the fluctuation state in the L2 acquisition of articles. For example, the question whether if the learner speaks an L1 which has articles, will transfer from L1 be evident or not, needs to be answered.

To answer the above question, Hawkins et al. (2006) hypothesised that Japanese learners of English will fluctuate between definiteness and specificity context, while Greek learners will be able to transfer the Greek article system into L2 English interlanguage system. Their participants were two groups. The first group was the L2 intermediate learners of English who spoke Japanese, an article-less language, as their L1. The second group included L1 Greek

speakers who were advanced learners of L2 English. The research tool was an elicitation task. Results from this study showed that L1 transfer is a factor which regulates learners' tendencies of fluctuating between definiteness and specificity settings, since the Japanese group fluctuated between the two settings, while the Greek group evidenced an accurate use of English articles. However, Hawkins et al. (2006) used a Greek group who were advanced learners of English. Thus, it could be relevant if there were different proficiency L2 English groups, because the FH is a hypothesis for a temporary tendency in learners' initial state use of articles. It can be further recommended from this idea that, perhaps, the Greek L1 group were accurate not only because these learners transferred the Greek article system to English L2, but also because these participants were more advanced English language learners. Therefore, they were able to use strategies and clues in encoding articles to their appropriate values.

Garcia-Mayo (2009) followed up by hypothesizing that adult Spanish speakers who learn English as L2 will not fluctuate between the features of [+definite] and [+specific] because Spanish has articles. Thus, learners will be able to transfer these morphological markers from L1 Spanish to mark the correct article distinction in L2 English. This author, different from Hawkins et al. (2006), used 60 L1 Spanish adult speakers and 15 L1 English speakers as control groups. The participants had different English proficiency levels. Thus, the author also hypothesized that if any difference is noticed then it will be attributed to learners' L2 proficiency levels. The forced choice elicitation task was done for 90 minutes. Results showed that the learners were not affected by the fluctuations between definiteness and specificity. The author took this as a sign that L1 Spanish helped them to perform in a native-like fashion.

The same results were reported by Ghissh (2009) who tested L2 English learners who were L1 Syrian Arabic or French speakers. Syrian Arabic has an overt definite article while French has no morphological marker for bare plurals. 84 participants: 57 Syrian Arabic speakers, 18

French speakers and a control group of 9 English native speakers, all university students, postgraduate and undergraduate, did a forced choice elicitation and an oral production task. In the results, fluctuation was not evident, although learners showed the characteristic full access to UG. In short, they marked the appropriate value of articles following the proposed ACP of UG. In addition, the accuracy in the use of articles was taken as a sign of L1 transfer to L2.

The above two studies, Ghisseh (2009) and Garcia-Mayo (2009), support in common that transfer overrides UG. However, Deprez, Sleeman and Gruella (2011) reported results which show that the learners who speak article-based language can fluctuate in acquisition of another L2 article-based language. These researchers tested the acquisition of L2 French articles by learners who speak either L1 Dutch or L1 Arabic, which are both article-based languages. In this study, participants showed a tendency differing from the FH views. In short, participants did not transfer the L1 system. Instead, they made specificity-based errors, which were more evident in the beginner group.

The fluctuation tendency that is observed in L2 learners who speak L1s which are article-less languages, should not be taken as the only errors that L2 learners can make while using an L2 article system. Tryzna (2009) reported this incidence where the L1 speakers of article-less languages who learned L2 English showed not only fluctuation between definiteness and specificity contexts, but also the overuse of definite articles in all contexts. The participants were divided in three groups, of which the first two groups were 19 L1 Polish and 17 L1 Mandarin Chinese speakers who were L2 advanced learners of English and had undergone 12 months of naturalistic input. The third group was an intermediate L2 English-L1 Polish group who had not had any exposure to naturalistic input. The proficiency levels were classified through the Oxford Quick Placement Test (OQPT) where the advanced group were taken as the ones who had scored above 50% and the intermediate group as those who scored between

39 and 49%. The research task was a forced choice elicitation task which was piloted with a control group of 7 adults who supplied the target articles. Results from this study showed that the intermediate group which had no exposure to naturalistic input, did not fluctuate but rather used the definite articles more often in all contexts. This supports the idea that fluctuation is not the only error that L2 learners make when they use articles. The author concluded that this evidence undermines the predictions of the ACP which suggests substitution errors as the main type of errors L2 learners make. The author suggested that the ACP may not be valid in its approach to definiteness, and thus it should be regarded as a cross-linguistic generalization rather than a parameter.

Another challenge to the ACP and FH was observed through the learner processing variable. Kyoungsook and Lakshmanan (2009) investigated the processing role of the ACP in Korean L2 English learners. The participants were 25 native speakers of Korean. All were graduate or undergraduate university students, advanced and intermediate learners based on a close pre-test (article- insertion). All 25 participants had chances to stay in the United States. There were also native English speakers who served as a control group. This author used two types of tools: the self-paced reading task and an off-line semantic acceptability rating task.

Results from this study confirmed that the native control group distinguished between *a* and *the* based upon definiteness rather than specificity. As for the L2 learners, the results from the on-line task showed that the intermediate level learners adhered to the specificity setting while the advanced level learners fluctuated between the specificity and definiteness settings. In the off-line test, the intermediate learners fluctuated between the two ACP settings while the advanced learners adhered to the definiteness setting. Looking at these results, it might seem that the FH is not the hypothesis for the initial state only. But the author of this study suggests from this result that the processing role of the ACP is also a variable for the ACP and FH

perspectives because the results suggest that when there is more time to process the semantic aspect of articles, the L2 performance also improves.

Furthermore, Leung (2005) examined the fluctuation tendency in L3 French acquisition and argued that there was an influence of L2 because her results revealed the use of correct articles in the given contexts for the group who speaks L1 Cantonese (an article-less language) and learns L2 English (an article language) and L3 French (an article language). Within the same L3 acquisition perspective, Jaensch (2008) supports the idea that the fluctuation in L3 acquisition of definiteness by L1 Japanese (an article-less language) who learn L2 English and L3 German (both article languages) decreases with accordance to learner's L2 proficiency.

To conclude, it has been shown in this subsection that there are two views which encompass the issues of the acquisition of L2 articles, especially in a generative or UG perspective. In the L1 full transfer view, the learners who speak an L1 which has an article system, find it easier to use the L2 article system. But, in the UG access view, the learners will use the L2 article system based on the UG parametric choice between article specificity and definiteness. Moreover, wherever the learners' L1s are article-less, fluctuation between the two parameters will occur. Both views have been supported and contradicted by different studies, and this brings more interest for future researchers. In the light of such interest, the perspectives in L1 transfer and UG access have been extended to multilingual acquisition. Thus, studies which examine multilingual acquisition initial state models are reviewed in the following subsection.

4.4 Empirical studies on L3 transfer

In this subsection, a review of studies which tested the assumptions held in the L3 acquisition models is presented. The section is divided in three sections starting with studies which support the TPM, studies which support the CEM and finally studies which support the L1 status factor, the L2 status factor and the influence from the L3 to the L2 and/or the L1. This review is

presented to show that the assumptions held in multilingual acquisition transfer theorisation are still inconclusive and invite further analysis.

4.4.1 Empirical studies in support of typological similarity

De Angelis and Selinker (2001) showed interest in the prediction that any previous language known by a multilingual learner can influence the acquisition process of the learner's L3. These authors sought to understand the nature of the interlanguage transfer and how the linguistic systems which are present in the mind of a learner compete. The participants for this study were two multilingual adults who live in England. One was 50 years old, a speaker of English, Spanish and Italian, but a native speaker of French. This participant was highly fluent in English. The second subject was 45 years old and an interlanguage speaker of Spanish and Italian.

Both participants underwent different interview procedures. The first subject was interviewed the first time by a native speaker of Italian. The participant was asked about her general experience and interest in being in a foreign country. The interview was tape recorded. After six months, the same subject was asked if she was familiar with the English words which she produced during the first interview and if she would be able to translate those English terms into Italian. The second subject was asked to watch the Italian news on RaiUno daily and prepare an oral report of the last event, which was to be presented to the same interviewer on the following day. The presentation of the report was tape recorded over a period of five months. In total 22 recordings were obtained. Results from this study showed two types of transfer. The first type is evidence of the use of entire non-target interlanguage words. Both participants showed a tendency to strategically use Spanish words for target Italian words. The second type is non-target language free or bound morphemes. According to this study, interlanguage transfer (transfer from the non-native language) showed a privilege over native

language transfer. The same conclusion was made by Flynn (2009). As reviewed in detail in subsection 2.2.1, Flynn (2009) concluded that the L2 Russian interlanguage has a privileged status in terms of the influence of the subsequent language acquisition.

Na Ranong and Leung (2009) confirmed that L2 typological similarity to L3 can influence L3 acquisition, but they also reached the conclusion that L1 can be a source of transfer in L3 acquisition. These researchers examined the acquisition of the null object in L3 Chinese by L1 Thai who have learned L2 English. They sought to investigate if the L3 and L2 Chinese null object patterns would match the L1 Chinese and the L1 Thai null object patterns.

Participants were allocated in three groups. The first group encompassed 20 Thai native speakers who had been studying Chinese for 1.5 years at Thammasat University in Thailand, and they had learnt English as L2 for 8-12 years. The second group was 7 English native speakers who learned Chinese as an L2. The third group included 20 Chinese speakers as a control group. The experimental task was an offline written interpretation task. The task was produced in both Chinese and Thai. The sentences had two clauses without context. The clauses involved embedded null objects and overt objects. There was a total of 34 items in each version, made up of 24 items and 10 distractors.

In the results, there were no significant statistical differences between the group performances. The L1 Thai-L2 English-L3 Chinese group performed in a similar way in both the L3 Chinese and L1 Thai versions. In other word, the L3 Chinese interlanguage of the L1 Thai speakers resembled their L1 Thai performance in accepting the co-indexation between embedded object and the overt objects. While this can lead to a conclusion that L1 alone can influence the L3 acquisition, the L2 English-L3 Chinese group also performed in a similar way to the L3 and L1 Chinese group. This was interpreted by the researcher as evidence for typology or psychotypology since the L2 English-L3 Chinese learners treated null object pronouns in

Chinese as syntactically equivalent but phonetically different to English overt object pronouns. Thus, this research leads to a conclusion that it is not only the L1 influence that can guide the L3 acquisition but the L2 typological relation between L2 and L3 can be the factor for the L3 transfer.

To confirm the role of typology, Rothman and Cabrelli (2010) also studied the acquisition of the null subject parameter by comparing results from four groups. Participants were adult L1 English speakers who were non-native speakers of French or Italian. The participants were sampled as follows: L1 English speakers learning L2 French, L1 English speakers learning L2 Italian, L1 English speakers learning L3 French and with advanced L2 Spanish and L1 English speakers learning L3 Italian and with advanced L2 Spanish. They all had the same amount of exposure to the L2 or L3 target languages.

The study sought to answer the question whether typological proximity between the languages would determine the L3 positive transfer. The leading hypothesis was that for the L2 groups, transfer will be from the L1 English, while for the L3 groups transfer will be from the L2 Spanish interlanguage, given the typological relations among Spanish, French and Italian. However, results from this study did not confirm the pre-set hypothesis since the transfer effect was ambiguous in both groups. There was no difference between the L2 groups and the L3 groups; also, no difference was noted between groups in the L3. Although the researchers recommend results from this study as an evidence for and implication of L2 interlanguage development and L3 ultimate attainment, the ambiguity of the results brings questions about such a comparison. In another view, the same amount of exposure to L2 Italian or French, and to L3 Italian and French, was at play.

Recently, the typological factor has been revealed by the non-facilitative transfer from an L2 with a target property or feature which is not related to that of an L3. This has been the case in

research which studied relative clause and word order (Rothman, 2011), object structures (Montrul, Dias and Santos, 2011), differential object marking (Giancaspro, Halloran and Iverson, 2015), verb raising in dative forms (Cabrelli Amaro, Amaro, and Rothman, 2015) and mood features (Child, 2017). Specifically, Giancaspro, Halloran and Iverson (2015) compared three bilingual groups (L1 English-L2 Spanish, L1 Spanish-L2 English and heritage Spanish English) learners of L3 Brazilian Portuguese with a goal of testing the assumptions held within the L3 initial state acquisition models. The prediction was that since Spanish is typologically closer to Portuguese, the learners would transfer Spanish structure to L3 Brazilian Portuguese irrespective of it being L1 or L2. In the results however, Spanish transferred negatively to L3 Brazilian Portuguese. These authors then argue for the TPM assumptions and reject the CEM. In addition, Cabrelli Amaro, Amaro and Rothman (2015) contends that the non-facilitative transfer, based on the TPM factors at the L3 initial state, can regress and eventually reach full attainment with regard to the developmental state. These authors did a cross-sectional analysis of L3 Brazilian Portuguese at initial and developmental stages by the L1 Spanish-L2 English and L1 English-L2 Spanish groups. As in Giancaspro, Halloran and Iverson (2015), Spanish transferred negatively at the initial state of L3 Brazilian Portuguese irrespective of it being the L1 or L2 and therefore, results provide support for the TPM. However, the Spanish negative transfer was regressed at the developmental stage of L3 Brazilian Portuguese.

4.4.2 Empirical studies in support of the Cumulative Enhancement Model (CEM)

On testing the CEM, Berkes and Flynn (2012) (also reviewed in subsection 4.2.1 as a study which used the L3 only design) studied the acquisition of a Complementizer Phrase (CP) by L3 learners of English who are L1 Hungarian and L2 German. The aims of this study included to provide further evidence for CEM and to examine the role of the last learned language. Since English and Hungarian are parametrically similar in terms of head-initial structure, which triggers SVO within a restrictive relative clause, the predictions of the study were that L1

Hungarian could facilitate the L3 English acquisition and if the previous learned language had any role to play in L3 acquisition, then there would be some remarkable features of L2 German on the L3 acquisition process.

Participants included 42 university students who are L1 German speakers and underwent 10 years of formal English instruction, with English as their L2; and, 36 high school students who are L1 Hungarian speakers who are L2 German and learning English as their L3. Results showed that the L3 English group did not need the L1 Hungarian construction to generate the L3 target CPs. Learners did not show that they used the free relative clause easier than that of the headed relative clause. This supports the CEM model which proposes that any previous language may have a privilege on the acquisition of the subsequent language.

The same conclusion as the one in the paragraph above was reached by Rothman & Halloran (2013). They studied morphosyntactic transfer in four groups of multilingual adults who had successfully acquired an L2 after an L1, and in adulthood were acquiring another language. The authors sought to discover if previous language knowledge would influence acquisition of L3 and if yes how this would differ from linguistic transfer in the case of adults with high levels of proficiency in previous languages. Results show that previous known language plays a role in the L3 acquisition. Contrary to the conclusions made by Berkes and Flynn (2012) and Rothman and Halloran (2013) are the results of the study by Kullundary and Gabriele (2012), also reviewed under subsection 2.2.2 as a study which used a holistic design. Kullundary and Gabriele concluded from a study of relative clauses in L3 English by native speakers of Tuvan (a Turkic language spoken in Russia, Mongolia and China) that both negative and positive transfer were part of transfer in multilingual acquisition.

In addition, occurrence of both facilitative (positive) and non-facilitative (negative) transfer have been reported in studies which propose transfer to be triggered by similarity between the

structures of previous learned languages and subsequent ones. When a certain structure is similar in all languages, positive transfer is likely to occur, while dissimilarity can lead to negative transfer whether from the L1 and/or the L2 (Mykhaylyk, Mitrofanova, Rodina and Westergaard, 2015; Westergaard, Mitrofanova, Mykhaylyk and Rodina, 2017).

A similar view is reported by Slabakova (2017). In addition, Slabakova (2017)'s scalpel model proposes that negative or positive transfer is likely to occur not only due to typological or proximity factors, but correspondingly due to other factors such as; construction frequency, correct input, prevalent use and linguistic complexity. In addition to current reports on transfer issues is Fallah, Jabbari and Faziratfar (2016) who note that transfer in L3 acquisition, whether facilitative or non-facilitative, is triggered by language of communication. They reached this conclusion by examining the use of L3 English possessives by L1 Persian and L2 Mazandarani learners.

In an L3 developmental state (as opposed to initial state), CEM is supported by a study of L3 English acquisition of object drop by L1 Basque-L2 Spanish-L3 English learners (Garcia-Mayo and Slabakova, 2015). Through a comparison between an L1 Spanish-L2 English group and two L3 English groups: an L1 Basque-L2 Spanish-L3 English group and an L1 Spanish-L2 Basque-L3 English group, Garcia-Mayo and Slabakova (2015) predicted the L3 English interlanguage to be characterised by either object drop across the board if L2 Basque transfers to L3 English. On the contrary, object drop will only be accepted in non-specific contexts, if L1/L2 Spanish influences the L3 English interlanguage. Results showed that the L3 groups behave alike and in line with the L2 group by accepting the object drop within the non-specific context in L3 English, which is the structure of Spanish object marking. The authors concluded that Spanish, whether L1 or L2, facilitated the subsequent language acquisition. Hence, CEM was supported rather than the L1 status factor, L2 status factor and TPM.

4.4.3 Empirical studies in support of the L1 and L2 Status and regressive transfer

Apart from the TPM and CEM, the L1 and the L2 status factor models have also reported to reveal their influence on subsequent languages. The L1 status factor model has been researched in studies such as Hermas (2010; 2014; 2015) which considered the mirror method of the comparison between the speakers of L1 Arabic-L2 French-L3 English. Specifically, Hermas (2014; 2015) examined the relationship between L1 transfer and the ultimate attainment of L3 English restrictive relative clauses. Through the Accessibility Judgement Task (AJT) and preference task, Hermas (2014) firstly revealed that L1 Arabic influenced L3 English acquisition. The author argues for an economical cognitive processing ability as a factor for such L1 transfer as opposed to psycho-typological similarity between the L2 French and L3 English. The results, in addition, showed an L3 English native-like performance with regard to the ultimate attainment analysis. Afterwards, Hermas (2015) found, however, that L1 Arabic transferred negatively, while L2 French transferred positively to the L3 English relative clause at the intermediate stage. In addition, the advanced L3 learners showed an ability to successfully restructure the target form [-wh] for the native one [\pm definite].

Sanz, Park and Lado (2015) followed a functional approach (as opposed to a generative approach) to shed light upon the Cross Linguistic Influence (CLI) examining the L3 Latin by L1 English native speakers who were classroom learners of either L2 Spanish or Japanese. Questioning whether the two groups (L2 Spanish and L2 Japanese) would use the same processing strategies, they studied the acquisition of L3 Latin transitive sentences-thematic role assignment at initial state and beyond. In the results, there was evidence of both groups relying on SVO cues from their L1 English rather than their L2s (Spanish or Japanese—which rely, respectively, on case and agreement cues).

Finally, for the L2 status factor Wrembel (2010) showed that the L2 has a privileged position to transfer to an L3 due to the foreign language effect. However, such an effect was revealed to decrease with an increase in L3 proficiency on acquisition of L3 English phonology (see also comprehensive review on other empirical studies on L3 acquisition of phonology and phonetics by Cabrelli and Wrembel (2016). Very recently, Stadt (2019) shed light on the influence in L3 acquisition by examining the L3 French finite verb placement in declarative root clauses. The results from this study showed that the L2 English, rather than the L1 Dutch, transferred more often to the L3 French, especially due to the L2 education factor. The bilingual learners who use L2 English more often naturally, showed transfer from L2 English while the Dutch mainstream learners who learn English like a subject showed transfer from both L1 Dutch and L2 English. Moreover, negative transfer from L2 English to L3 French was also revealed.

Influence from an L3 to an L2 and/or an L1 (regressive transfer) were reported by Matthiew, Cheung and Tsang (2014) in their investigation of the acquisition of tense and aspect. Tsang (2015) also reported the same in a study on the acquisition of L3 French number agreement influence on L2 English. In addition, Cabrelli (2017) studied the Phonological Permeability Hypothesis and the results revealed that L3 Brazilian-Portuguese phonological system affected both the L1 and L2 Spanish systems (see also Cabrelli, 2017b; for a comprehensive review of studies which revealed regressive transfer). Very recently, Ahn and Mao (2019) have also shown that L3 Korean influences the acquisition of L2 English reflexives.

Conclusively, in the light of the reviewed literature, multilingual acquisition inquiry is mostly developing within a norm which seeks to understand the influence of the previous known languages on the acquisition of the subsequent language and vice-versa. While for some studies the hypothesis entailed in multilingual acquisition models are confirmed, for other studies, the

results are inconclusive. Moreover, most of the factors or variables which are presupposed to trigger transfer effects in multilingual acquisition are language related. Thus, a need to examine evidence derived from multiple theoretical perspectives and different variables is still evident. Following the same trend, the current study shows that when the two foreign languages are acquired concurrently, negative transfer is likely to happen because, despite the fact that the former language might have started being acquired a bit earlier than the later, learners have not reached any high level of proficiency in the former language.

4.5 Empirical studies related to this study

In this subsection, previous related studies are reviewed. As it has been introduced in chapter one, the aim and the design of this study is to investigate the acquisition of DPs which are headed by articles in English and French by L1 Swahili speakers. Thus, the presentation in this section is divided thematically in four subsections. The first subsection includes studies on the acquisition of articles and their related grammatical features of gender, number and definiteness in other languages. The second subsection includes studies on the acquisition of L3 French articles, the third subsection entails a review of current studies on the acquisition of articles by Swahili speakers, and the last subsection includes studies with related design and methods. This section is designed to highlight the gap addressed by the current study.

4.5.1 Studies on the acquisition of number and definiteness

According to Sabourin, Stowe and de Haan (2006), positive transfer is likely to take place when morphological realization of the gender features is similar. In their study of the acquisition of gender marking in L3 Dutch, Sabourin, Stowe and de Haan (2006) sought to explore if there is transfer of gender category, and if it is dependent solely on the existence of this category in the previous typologically closer languages, by native speakers of either English or German who are L2 speakers of one of the Romance language (French, Spanish or Italian). For them, native

speakers of German and Romance languages would transfer the feature in L3 Dutch, and English would not. Results showed that only German involved positive transfer but not the Romance languages because they have different morphological realizations to Dutch.

As discussed in section 2.3.1, Jaensch (2008) investigated the presence of explicit and implicit articles in the L3 German of L1 Japanese-L2 English speakers. The results revealed a slight fluctuation in the selection of subject based on definiteness and specificity. Results further showed the omission of articles in oral production tasks. Jaensch (2009) subsequently looked at the L3 German acquisition of DPs, focusing on definiteness, gender and number marking, by L1 Japanese speakers with different levels of L2 English. She sought to discover if learners with higher L2 English proficiency would outperform their counterparts in L3 German gender marking and case assignment. Results show that the higher proficiency group outperformed the lower proficiency group. These results support the assumption that L3 fluctuation of definiteness by L1 Japanese speakers [-article] who learn L2 English [+article] and L3 German [+ article] decreases with an increase in learners' L2 proficiency.

More recently, a study on L3 English article usage by Gutiérrez-Magando and Martínez-Adrián, (2018) has shown that Basque-Spanish bilingual learners of L3 English still make errors of omission and overuse *the* in the context of *a*. These authors conclude that typological similarity between Spanish and English, in terms of being [+article], did not play a role in L3 transfer. Rather, the recency factor, that their participants transferred from Basque, a language which they frequently use daily in school context, was supported.

The body of knowledge on acquisition of articles is infinite. There is still a lot to investigate. Therefore, the current study followed this path by studying the acquisition of definiteness and number marking in L2 English and L3 French articles by learners who speak L1 Swahili (an article-less language). Contrary to previous studies, the current study seeks to uncover if the

patterns of article usage can be accounted for by the concurrent acquisition of the L2 and the L3. However, the transfer characteristics on L3 French, with the current study, is not expected to reveal as positive transfer from the L2 English or from the L1 Swahili. The evidence from Hanifi (2015) shows that English and French can influence each other. Hanifi (2015) determined the influence of French L2 on English L3 acquisition by Algerian students and concluded that French L2 facilitated English L3 acquisition as there were little errors in a translation task from French to English than in the counterpart version, from English to French. However, the current study predicts that facilitative influence will not occur since the current target languages are being acquired concurrently. In addition, although the participants in the current study started acquiring English a bit earlier than French, they have not yet reached a high level of proficiency in L2 English. In the following subsection, previous studies which were done specifically on L3 French are reviewed.

4.5.2 Studies on the acquisition of functional categories in L3 French

Leung (2005) tested the Full Access/Full Transfer hypotheses (FA/FT) in L3 French learners' production of articles. She compared two groups: L1 Cantonese-L2 English learners of L3 French, and L1 Vietnamese learners of L2 French. Her assumption was that transfer should come from the L2. In her results, the L3 French group correctly produced the definite articles more often than the L2 French group. She claimed that L1 transfer does not play a greater role, but that L3 positive transfer, according to her study, comes rather from the L2.

Leung (2007) subsequently examined the acquisition of articles by L1 Cantonese-L2 English learners of L3 French. Participants performed different tasks including elicited oral and written production tasks, and multiple choice and preference tasks. Her results revealed that the L1 does not transfer its structures to the L3. Different from Leung (2005), Leung (2007) further argues that the L3 is not an extension of the L2 because no L2 transfer was revealed at the

initial stage. Therefore, she concludes that difficulties in L3 acquisition of nominal functional properties come from learners' processing constraints.

Leung (2008) goes on to argue that if a learner's L1 lacks the formal features present in L2 or L3, they can still acquire those features in both L2 and L3. This observation was generated from a study done on the acquisition of L3 French verb finiteness, and agreement of person and number by L1 Chinese native speakers who learned L2 English and L3 French. However, Leung (2008) attributed such ease in acquiring the L2 and L3 formal features which are absent in the learner's L1, to the linguistic awareness (Jessner, 2006) which an L3 learner is assumed to possess. The argument is that the more languages a learner has acquired, the easier it will be for the learner to acquire another language, especially if the previous languages and such an additional language are typologically related (Leung, 2008).

In light of Leung's work (2005, 2007, 2008) above, it still seems that the typological relation between English and French, especially in the structure of the articles, plays a greater role in the acquisition of L3 French by learners who speak an L1 which has no article, and L2 English. Moreover, Leung's research design is similar to the design of the current study. The current study uses learners who speak the L1 article-less language and learn concurrently L2 English and L3 French. I now turn this discussion to the review of two previous studies which examined L1 Swahili speakers.

4.5.3 Studies on the acquisition of articles by Swahili speakers

In a natural context longitudinal study, Buil (2014) sought to discover if L3 learners start from the option available in their L1 in the initial state of acquiring Spanish DPs. She conducted a longitudinal study in four L1 Swahili speakers with L2 English who learn L3 Spanish in a natural context, at the State University of Zanzibar (SUZA), in Tanzania. In her analysis, she considered Swahili DP functional categories, SGEN and SNUM and the syntactic characteristic

of raising N to NUM. She sought to test the theory that adult L3 learners use the repertoires of grammatical categories and features available in their L1. Among her questions was whether the null structures of Swahili DPs would reflect in L3 Spanish interlanguage. She hypothesized, however, that if this question was to be answered, then, the absence of the null features in learners' interlanguage was due to the absence of these features in the L2 of these participants. Thus, according to this study, transfer to L3 Spanish was expected more from the L2 English than the L1 Swahili. The results showed that the L1 Swahili learners of L3 Spanish with L2 English seemed to transfer both the L1 and the L2 DP features to the L3 interlanguage.

Kimambo (2016) analysed the acquisition of (in)definite in English as a foreign language by secondary school Swahili speakers in Tanzania. The focus of his study included, among others, the use of articles in specific and non-specific contexts in writing and speaking. In this study, the FH was tested alongside other hypotheses which define the L2 acquisition of articles.

On the cross-linguistic relationship between Swahili and English, the study predicted that Swahili speakers would omit articles and fluctuate between definiteness and specificity context, since English has grammatical articles while Swahili is an article-less language which realise the definiteness only through the semantic-pragmatic context of interaction.

The study collected quantitative data from 163 secondary school learners using an acceptability judgement, a forced elicitation and picture-description tasks. The results show that Swahili speakers who learn English transfer the Swahili bare noun phrase structure to their English interlanguage and used noun + pronoun to realise definiteness in English, mostly at elementary level. The learners also showed the tendency of fluctuating between the definiteness and specificity context.

Both Buil (2014) and Kimambo (2016) shed light on the way Swahili speakers behave as far as the acquisition of a foreign language is concerned. They support the hypothesis that the

Swahili speaker learners of a foreign language start with the UG clues in the way they use functional categories of their L2 or L3. On top of that, these studies provide evidence for the fact that the difficulty these learners experience, especially in the case of the acquisition of articles, is due to the cross-linguistic influence between their native and their respective target languages. This discussion is returned to in the following section, where the gap left by the previous studies is highlighted.

4.6 Conclusion and remarks on the originality of the current study

This section is designed to provide a conclusion to the current chapter and to highlight the gap that the current study attempts to address. It has been shown, in the light of the review presented in this chapter, that previous studies on multilingual acquisition have mostly dealt with consecutive multilingual acquisition, leaving other types of multilingual acquisition, for example, concurrent multilingual acquisition, understudied. However, it has been shown in light of this reviewed literature that whether the transfer on an L3 is from L1 or L2 or both, it is still arguable and calls for the attention of further research.

It has been also shown that, as far as cross-linguistic influence is concerned, several dependent variables such as age of acquisition, language proficiency, formal and informal contexts, gender and number of languages involved, have been investigated and arouse questions which make place for several other variables. Following this review, the concurrent acquisition of two foreign languages is another independent variable suggested. In the light of the reviewed literature and to the best of the current researcher's understanding, this study is the first to analyse the acquisition of two foreign languages by a Swahili speakers in Tanzania. I have characterised the study as multilingual acquisition, rather than Third Language Acquisition (TLA) because it analyses both L2 and L3 production by the L1 Swahili speaker multilingual learner. Unlike most previous multilingual acquisition studies, this study focuses on examining

the effect of the concurrent acquisition of two foreign languages; that is acquisition of an L3 in close succession with an L2, before reaching a high or native-like proficiency in the L2. Practically, a learner learns the two foreign languages side by side. This analysis draws from an argument that multilingual acquisition is complex.

Previous scholars on multilingual acquisition, such as Cenoz (2000), have pointed out different variables (refer to section 2.2 of chapter two) which determine difficulties and transfer factors in L3 interlanguage systems. However, studying the effect of acquiring an L3 in close succession with an L2 (operationalised in this study as concurrent multilingual acquisition) can be a novel analysis which may shed light upon the predictions held in the field of multilingual acquisition research. Thus, the current study does not only aim at examining whether the languages which are cross-linguistically similar or dissimilar influence each other, but also at examining whether such an influence can be revealed likewise between a learner who learned one foreign language and the learner who simultaneously learns two foreign languages.

To fulfil these aims, the mirror-image method of comparing results from two or three groups to provide evidence for the pre-set predictions is used. However, unlike previous studies which compared an L1 control group and an L3 group or an L2 group and an L3 group, the current study follows a holistic design which compares results between the L2 and the L3 groups which have the same linguistic background.

The concurrent acquisition of two foreign languages which is analysed in the current study focuses on the overall linguistic system available in the mind of the learner. Regarding such a focus, the findings from this study will add comprehensive knowledge to the existing understanding of the source, nature, and underlying variables for transfer on the acquisition of an L3 or any subsequent language. Moreover, such a comprehensive understanding can be

important also for a planning process of the Language of Learning and Teaching (LoLT) in different contexts of the world.

In conclusion, the current study bridged the gap which the previous studies left uncovered. Firstly, it focuses on the concurrent acquisition of two foreign languages, which is another variable for multilingual acquisition process. Secondly, it focuses on Tanzanian learners to cover a contextual gap. Thirdly, in the light of the FH, the current study does not only analyse the fluctuation tendencies in L2 and L3, but mainly wants to discover if concurrent acquisition regulates this tendency. Thus, this study's focuss on multilingual acquisition (specifically on concurrent acquisition of two non-native languages) in relation to the influence of an L2 and an L3 on each other in the African context makes its valuable contribution to the field.

CHAPTER 5

RESEARCH DESIGN AND METHODOLOGY

5.1 Introduction

This chapter aims to describe the designs and methods employed in this study and to clarify the reasons for using some designs and methods and not others. In the next section 5.2, the overall design of the study is framed within two research designs, namely one-shot experimental design and comparative cross-sectional design. In the following section 5.3, the methods for sample selection and research procedures are presented. The overall sampling method was purposive sampling, although a probability technique was employed for resolving some sampling challenges. The research methods section also presents the type of tools used for collecting the data and how the tools were obtained and developed. In addition, the area of the study and the reason for its selection, the data collection procedures, data analysis and presentation methods, as well as the research ethics issues are outlined. The penultimate section 5.4 presents the research challenges and how those challenges were resolved. Finally, the chapter ends with some concluding remarks in section 5.5.

5.2 Research design

This study seeks to understand the effects of the concurrent acquisition of L2 English and L3 French DPs headed by articles and their related semantic and grammatical features. The aim of the study is ultimately to understand the characteristics of a multilingual interlanguage. Therefore, the research is guided by generative linguistic theory and the concept of cross-linguistic influence. Within this theoretical framework, the research uses mostly quantitative, empirical data from learners' written language production (Ionin, 2012). In addition, this research is factorial in nature because it involves two independent variables: concurrent acquisition and the level of acquisition (Mackey & Gass 2005; Rasinger, 2008).

Regarding the nature of its investigation, this research uses two research designs, namely a one-shot experimental design and a comparative cross-section design. The study is experimental in the sense that it uses experimental research methods and it is a comparative cross-sectional design in the sense that it compares two groups of participants who are at different levels of language acquisition. The two designs are elaborated on in the following paragraphs.

One-shot experimental design composes the overall nature of this study design. This design is defined by Mackey & Gass (2005) as a research design in which we simply raise a question and seek to understand what learners know at this point in time through experimental tasks. This study used experimental tasks, such as cloze tests and truth value judgment tasks, to investigate what multilingual learners of English and French know about DPs headed by articles. No control group was involved, but groups controlled each other through the mirror-image method strategy which, according to Garcia Mayo & Rothman (2012), involves a comparative analysis between two groups of the same population and those groups are differentiated by a certain factorial variable. Additional to that, the results of one group predict the reality about the counterpart group.

The comparative cross-section design is a combined design of two parts. The first part of this design is cross-sectional design. This study used three groups according to level of instruction in the L3 French. The groups are Form Two and Form Three secondary school learners, as well as Form Five advanced secondary school learners. This design enables a researcher to investigate multiple cases at a time with enough data, time saving and enough sample (Dawson, 2002; Mackey & Gass 2005; Rasinger 2008;). This design was involved in the analysis of the issues raised in the first, second and fourth research questions (see chapter one). The design

was specifically important for analysing the effect of level of instruction on L3 French (in)definite article marking.

The second part is a comparative design. This study compared the L1 Swahili-L2 English learners (the L2 Group) and L1 Swahili-L2 English-L3 French (the L3 group) learners' production of DPs headed by articles by investigating three issues: (i) whether the concurrent acquisition determines the definiteness fluctuation tendency in L2 production and if this tendency extends to the L3 in the same way as in the L2, and (ii) if the TPM, the CEM, L1 and L2 status factor models are supported, given the linguistic proximity of English and French DPs and (iii) whether transfer of grammatical number marking originates from L1 Swahili or L2 English.

5.3 Research methods

This study employed quantitative methods which are presented thematically in the following subsections, starting with the methods for selection of a research area in subsection (5.3.1), the methods for obtaining a sample and sampling procedures in subsection (5.3.2), tools and types of data in subsection (5.3.3), the procedures for data collection in subsection (5.3.4) and the methods and procedures used in the data analysis in subsection (5.3.6). In addition, issues concerning research ethics are also presented in subsection 5.3.5.

5.3.1 Area of the study

This study was conducted in Tanzania at three public secondary schools (schools with Form 1-4) and three public advanced secondary schools (schools with Form 5-6). The decision to use public rather than private schools was due to the fact that the private schools would not contain the required sample (see subsection 5.3.2) as the learners of those schools are the ones who, in most cases, start learning both English and French at primary school level.

The schools were selected from the list of schools on the Tanzania Institute of Education (TIE) website, on the condition that they offer French from form one, for secondary school, and KLF-combination⁹ from form five. The informal communication between myself as the researcher and colleagues who are French teachers in these schools also provided a guide to this selection. The selected secondary schools were Dar es Salaam in Dar es Salaam region, Kazima in Tabora, and Kabanga in Kagera. The advanced secondary schools were Zanaki in Dar es Salaam, Milambo in Tabora and Korogwe in Tanga.

This selection considered both rural and urban contexts in order to include a population sample of L1 Swahili (both Swahili only and Swahili plus another local Bantu language) speakers who are learning L2 English and L3 French as foreign languages.

5.3.2 Participants: Sample and sampling procedures

The sample for this study included 120 participants who are Tanzanian Swahili speakers, both male and female. Because gender was not among the independent variables for this study, equal number of males and female was not a prerequisite. The reason for this was largely practical, as there is a far greater number of female learners in the language classes (especially in the French classes) than male learners. This sample of 120 participants was selected from three cross-sectional groups and distributed as follows: 30 L1 Swahili-L2 English-L3 French Form Five learners, 30 L1 Swahili-L2 English-L3 French Form Three learners and 60 Form Two secondary school learners, of which 30 were L1 Swahili-L2 English learners and 30 were L1 Swahili-L2 English-L3 French learners. These groups were operationalised differently regarding the concurrent acquisition factor. The learners who learn both L2 English and L3 French (L1 Swahili-L2 English-L3 French) are operationalised (henceforth) as L3 group. Those who learn only L2 English (L1 Swahili-L2 English) are operationalised as L2 group.

⁹ A combination of language subjects: Swahili, English Language and French.

This distribution provided a relative interval of years of exposure to the target languages' formal instruction. Form Two learners have at least 8 years of learning English and 1.5 years of French, Form Three learners have 10 years of learning English and 2.5 years of French, and Form Five learners have 12 years of learning English and 3.5 years of French.

In addition, the L3 group learns both L2 English and L3 French side by side, in the sense that, by the time they start learning L3 French, they have not reached any high proficiency in L2 English, although practically, these learners start learning L2 English earlier than French. The L3 group does however have a greater chance of being in informal contexts where they are able to develop their L2 English, rather than L3 French. For example, these learners get the opportunity to use English more naturally, because in Tanzania the secondary school environment is characterised by an 'English only policy' where learners are required to use English throughout their school time in communication with their teachers and among themselves, while they use French only during the class. In addition, English is a language of instruction and teaching at secondary school. However, due to other social and political factors, most Tanzanians learners still have challenges in mastering the use of English, even in the higher stages of learning this language.

The issues of sampling and sample size in relation to results generalization however raise debate. The prevailing question in the discussion is what sample size can be considered large enough for the generalization of results. In general, a large sample is ideal, especially for the matter of generalizability and statistical power (Schütze and Sprouse, 2013). However, Buchstaller and Khattab (2013) argue that in formal linguistic and language research this has not always been the case. What matters is the amount of data, in terms of tokens produced by each participant in a sample. In this study, the sample size of 120 participants was designed to produce 10500 total tokens of interlanguage article use. It should be noted also that this study

did not use any control group for three reasons. Firstly, there is an argument that the multilingual acquisition process is quite different from the second language acquisition process. Also, an individual with multiple linguistic systems processes language differently from a monolingual (Cabrelli, Flynn and Rothman, 2012). Therefore, comparing a multilingual learner to a native speaker of a target language, as is often done in SLA research, is a comparative fallacy (Cabrelli, Flynn and Rothman, 2012; Cenoz, 2013).

On the contrary, the comparison between learners' subsequent interlanguage use and previous known language competences is suggested in place of native speaker comparisons (Cabrelli, Flynn and Rothman, 2012). This is the comparison which involves examining all the languages in which the multilingual learners have some competence. Cenoz (2013) uses the term "focus on multilingualism" to mean that all linguistic systems present in the mind of a multilingual learner should be considered in multilingual acquisition research. Thus, to take just the native speaker's linguistic system as a reference for the multilingual system has been argued to be a simplistic measure in multilingual acquisition research (Cenoz, 2013). Secondly, there are examples of researchers in L3 acquisition research who did not use any control group. These scholars, for example, Cenoz (2001), Jaensch (2012), Kullundary and Gabriele (2012), use only the target group or a comparison between the L2 and the L3 groups to conclude their findings on L3 acquisition. For example, Jaensch (2012) compared two groups whose L2 is English and whose L1s are different. Kullundary and Gabriele (2012) compared the L3 group to an L2 group whose L1 is the L2 of the L3 group. This strategy has been termed as "mirror-image method strategy" (Garcia Mayo & Rothman, 2012), where results of an L2 group can help in interpreting and controlling the results and conclusions for L3 acquisition.

The last reason for not using a control group in the current study was due to the nature of the research area. This study was undertaken in Tanzania. It aimed at examining both L2 English

and L3 French. Therefore, while it may be simple to propose that a researcher enlist a control group of native English speakers, it is a very difficult task, especially in terms of time and funding, to find a native French speaker control group. Involving an L3 control group would require a researcher to travel away from the research area to find a control group in another country. After advancing these three reasons, in the following paragraph, I discuss the way the sample for the current study was obtained.

The sampling methods, firstly, involved a purposive sampling strategy, where a sample is purposively chosen from knowledge of the existing target population (Mackey and Gass, 2005). A strategy of probability sampling, where a sample is chosen randomly, was also considered in the research areas where the number of a population present in the area exceeded the required sample, and where all of the population subjects were willing to participate in the study. In these cases, a probability sampling procedure was used in order to get only the required number and to prevent the rest of the participants from feeling rejected.

However, due to the nature of the target population, it was necessary to control for all sampling factors to minimise the sampling errors¹⁰. The factors which were considered were factors such as participants' native languages (other than Swahili), previously learned languages, proficiency in the target languages and years of exposure to formal instruction. In order to minimise the effects of sampling errors, participants were asked to fill in a bio-data questionnaire which elicited information concerning their education and linguistic background.

Participants were also given a grammar placement test; in French for form three and five and in both English and French for form two. Such tests included grammar questions, especially on the article form and meaning, to examine if they have acquired articles in their English and French interlanguages. This was done, in each independent school; two weeks before the

¹⁰ The situation when a sample does not have the same characteristics as the population (Podesva & Sharma 2013).

experiment was conducted in order for there to be sufficient time to analyse and get the required sample. The bio-data questionnaire and the language placement tests are attached in this dissertation in Appendix A. In both placement tests (English and/or French), form two participants were required to score at least a C grade, form three a B and form five an A in order to be included in the sample. Those who scored lower were automatically eliminated from the sample. This sampling technique is also used by other scholars in the field, such as Hsien Jen-Chin (2009). The bio-data questionnaire was analysed and all the 120 participants who were selected for the sample were shown to meet the characteristics of the required sample. Participants were all L1 Swahili speakers, with or without another local language as an additional L1, who started learning English in primary school and French in secondary school. In the groups where participants were mostly from rural areas, for example, the form two groups, the sample was predominantly made up by participants who had both Swahili and another local language as L1s, while those who were from urban areas, for example most form three and form five students, were predominantly L1 Swahili speakers. The overall characteristics of the sample are given in Table 5.1.

Table 5.1 The overall Participants' Characteristics in the Study

Groups	Placement Test Score (English and /or French)	L1 Swahili	L1 Swahili & other Local Language	Learning EL2 only	Learning EL2 & FL3
Form Two L2 Group	41%-60% Mean=51	7	23	30	0
Form Two L3 Group	41%-60% Mean=51	10	20	0	30
Form Three L3 Group	61%-80% Mean=71	24	6	0	30
Form Five L3 Group	81% - 100% Mean=91	20	10	0	30
Total		61	59	30	90

5.3.3 Research tools

This study was designed to use empirical data obtained from participants' written production of article use. The data was also quantifiable in terms of test scores. The measurement scale was ordinal and non-parametric tests were also employed. Therefore, experimental data collection tools (Ionin, 2012; Nunan, 2008) were used. The tool used to collect data for this study was a four-part elicitation task.

The first part was a cloze test in both English and French. A cloze test has also been used by previous researchers such as Gibson, Hufeisen and Libben (2001) and De Angelis and Selinker (2001). This part of the task contained 20 blanks to be filled in with the appropriate article form and was less contextualised in order to investigate the ability of the learners to think about the form-meaning relationship of a certain linguistic feature (Jessner, 2006:41). Hence, this part, in addition to the placement tests, helped to determine whether the learners already had the article system in their linguistic repertoires and that the study examined what it intended to examine.

The second part of the task was a discourse cloze test, again in both English and French. This was a narrative story with 20 blank spaces to be filled in with the appropriate form of the article. The third task was a Truth Value Judgment Task (TVJT) which Ionin (2012), Schütze & Sprouse, (2013) and Granger (2012) have all suggested as one of the important experimental tools in formal linguistics research. This task contained 20 sentences either in English or in French. In this task, participants were asked to judge if the use of article in the preceding sentence was correct, given the meaning of the second sentence. This type of task has also been used by other scholars, such as Kimambo (2016), Foote (2009) and Jin (2009).

The fourth part of the elicitation task involved writing a story corresponding to the sequential events presented in two pictures. Participants were given some of the vocabulary items, but

without articles. In each picture, participants were required to summarise what is happening in the picture series using five sentences which contain appropriate use of articles. Thus, for the two-picture series, this part of the task contained 10 contexts where a participant should use either a definite or indefinite article form. However, the fourth part of the tool was not included in the English test version because it was considered only for analyzing L3 French interlanguage characteristics. Therefore, for the first three parts, the task was formulated similarly in both English and French, although these were not direct translations of each other, with questions adapted from the internet¹¹ and from various language textbooks (see also Foote, 2009). In addition, I asked colleagues to check the correctness and the clarity of the adapted questions. In all tests, the articles were characterised as definite or indefinite articles and their use considered the context of the noun they refer to. This is whether a noun is second mentioned or not, unique in that context, or modified by a post modifier.

It should therefore be noted that the definite article was targeted to mark a specific reference to noun it would accompany, while the indefinite article forms were targeted for a non-specific reference (refer to the detailed argumentation, in the theoretical chapter, about how the classification of specificity was done in the current study). In this study, only two of Bickerton's (1981) article specificity contexts were involved, namely the [+SPEC +HK] context, which in fact involves the use of a definite article, and the [-SPEC -HK] context, which involves the use of an indefinite article form. A sample of the sentences (from the research tool) for the two contexts is presented below.

In French:

- (5.1) *Il y avait des motos*
 there were **indef-PL** cars
 'There were some cars' [-SPEC -HK]

- (5.2) *Il travail avec une copine*

¹¹ <http://www.adelaide.edu.au/English-for-uni> and <http://www.tolearnFrench.com>

he works with **indef-SG colleague**
 ‘He works with a colleague’ [-SPEC -HK]

- (5.3) *J’ai pris le lait qui était dans le frigo*
 I took **def-SG milk** which was in the fridge
 ‘I took the milk which was in the fridge’ [+SPEC +HK]

In English:

- (5.4) Peter always carries **a book** in his bag
 Peter always carries **indef-SG book** in his bag [-SPEC -HK]
- (5.5) I am looking for **a manager**. Any manager
 I am looking for **indef-SG manager**. Any manager [-SPEC -HK]
- (5.6) I am looking for **the teacher**. Ms. Mwakipesile.
 I am looking for **def-SG teacher**. Ms. Mwakipesile [+SPEC +HK]

In addition, all parts of the task were designed for the purpose of capturing both learners’ conscious and subconscious use¹² of articles. In addition, all parts of the task were designed to elicit all types of articles in terms of their form-meaning features. The targeted articles in both versions were all types of English and French articles: the definite article, indefinite, as well as the zero article. However, since French rarely allows the use of zero article, only four obligatory contexts for the use of zero articles were targeted as distractors in the first three parts of French test version.

The tasks as a whole were designed to collect a total of 6000 tokens of the use of articles. However, the form two L2 English-L3 French groups completed both versions of the test. Therefore, the total number of analysed tokens was 7800 altogether. For the first part of the task, the expected total number of tokens was 600 for each group, with the same totals for the second and the third parts. For the fourth part, the expected total number of tokens was 300 per each group. However, the number of contexts for each type of article was not constant.

¹² Subconscious use includes the actual or natural use of language while conscious use includes guided use. In this study, the cloze tests capture conscious use while the open tasks (picture series story composition) captures subconscious use of articles.

The French version had 38 contexts where the respondents were required to use a definite article, without the last part of the task which, as an open question, had 10 spaces for using the definite, indefinite or zero article. There were 18 contexts for indefinite use and 4 contexts for the zero article. This makes a total number of 70 contexts altogether. The English version on the other hand, had 34 contexts where the definite article was obligatory and 13 contexts for the indefinite article as well as 13 obligatory contexts for the zero article.

However, it should be noted that the unequal number of the obligatory contexts for the use of articles did not pose any effect during analysis because, in the analysis, the required total number of tokens for each article was the basis for the calculation of the extent of correct and incorrect scores for each article feature. (See section 5.3.6 on the analysis procedures for further clarification on this presentation). The elicitation tasks are attached in Appendix A.

5.3.4 Data collection procedures

Before starting data collection in the field, a pilot study was conducted at the University of Dar es Salaam in July 2018 using three (L3) French and three L2 English speakers with near native-like proficiency in the target languages. Two of the L3 French and the three L2 English pilot study participants were the English and French lecturers who have had a chance to live in the target language countries for at least a year and who have above C1 level in TOEFL and/or DELF/DALF examinations. One of the French pilot study participants was a senior lecturer in the French section who is also French near-native speaker from Rwanda.

The pilot study served to determine whether there were any errors related to task design and/or ambiguities in expected responses (see also Hsein-Jen Chin, 2009 Kullundary and Gabrielle, 2012; and Garcia-Mayo and Slabakova, 2015). Actually, the results from the pilot study helped to modify the test. Initially, the task was designed to contain five parts to be completed in one and a half hours. But with the pilot study, it was observed that the time for the task would not

be enough. Therefore, the task was modified to contain only four parts excluding the fifth part which was an open composition task on the heading “My last shopping trip”. In addition, the fourth part was also modified to the limitation of five sentences per each picture series.

Data collection in the field started in early August 2018 and finished in middle January 2019. The fieldwork took six months because I had to move from one area to another area step by step. The procedure started with the lower levels and proceeded to the advanced secondary schools. I went first to Kagera region in Ngara district where I elicited data from 30 form two L2 English-L3 French learners. It was difficult to get the counterpart English L2 group in the same area since all public schools mostly offer French from form one. Therefore, I went to Tabora region in September 2018 and elicited data from 30 Form Two L2 English learners from Kazima secondary school. The participants in this group learn English without French or any other foreign language. In October, I went to Dar es Salaam Region where I elicited data from 11 Form Three L3 French learners from Zanaki secondary school and 19 Form Three L3 French learners from Dar es Salaam secondary school. In early January 2019, I went to Korogwe in Tanga region and elicited data from 12 Form Five L3 learners and then went to Milambo secondary school in Tabora where I elicited data from 18 Form Five L3 learners.

In all the schools, data collection was done in the learners’ normal classes during the normal school timetable with the assistance of the French and English teachers, after school authority permission had been granted. The teachers were there to familiarise me with the classrooms, but all supervision and instruction concerning the test were given by me, as the researcher, in English or French and Swahili. The Form Two L3 group did both version of the test on two different days. They started with the English version on the first day and they did the French version on the following day. In all sessions the procedures were the same. The test was completed within one and a half hours.

During data collection, extra-linguistic factors, such as boredom, fatigue, physical and psychological distractors (see Mackey & Gass 2005) were controlled for by visiting the school environments before the day of the experiment to determine, for example, whether there were any physical distractors which could affect the research process. Furthermore, the task was done in the morning hours when the learners are not yet fatigued. The participants were also assured that the task was for research purposes and not for their academic records, in order to reduce the Hawthorn and halo effects¹³ (Mackey and Gass, 2005).

After the experiment, participants were asked to fill in an extra questionnaire which elicited their perspectives and attitudes towards the procedures and experiment to ensure that the study has measured what it intended to measure (see Appendix A). In the analysis of the extra questionnaire, most of the participants did not show any doubt about the difficulties in the test. They indicated that the test was moderately difficult. They also indicated that they did not feel any panic or psychological shock during the test. In addition, they indicated that the duration for the test was enough since almost all participants completed on time.

5.3.5 Consideration of research permission and ethical issues

Before undertaking field research, I applied for ethical clearance from Stellenbosch University's Humanities Research Ethics Committee (REC). The research project was evaluated and approved by the REC and then I was allowed to undertake the field work. The REC fieldwork permission is attached as an appendix.

In Tanzania, I also applied for research clearance from the University of Dar es Salaam, the academic institute which is authorized to clear academic researchers on behalf of the Tanzania Commission for Science and Technology (COSTECH). Because the fieldwork was to be done

¹³ Hawthorn effects are when participants behave differently from their usual behaviour, while halo effects are when participants provide answers (sometimes wrong answers) just to please a researcher.

at schools in different regions and districts, the University of Dar es Salaam provided introductory letters to the Regional Administrative Secretary (RAS) of each region where data collection would take place. From the RAS I had to attend to each District Administrative Secretary (DAS) who introduced me to the Municipal Executive Director (MED) or District Executive Director (DED). The MED or DED then allowed me to go to the District Education Officer (DEO) who finally allowed and introduced me to the Headmasters of the appropriate schools. The samples of clearance letters from the regional and district officers are attached in Appendix B.

Following ethical guidelines, no learners were forced to participate, and they were all informed of the objectives of the research and the data collection procedures. An informed consent form was provided to all parents in order to obtain consent for their children to participate in the study. In addition, every learner was asked to fill in an assent form indicating that they have understood why and how they will participate in the research. The informed consent and assent form templates for parents and learners are attached in Appendix B.

Furthermore, in the sampling procedures, those learners who were ready to participate but who were excluded because they did not meet the required characteristics for a sample, were informed of why they were eliminated and counselled not to feel like they were rejected. The learners who were selected for sample were assured that all the information they provided would be treated as confidential, and pseudonyms or participant numbers would be used to anonymise the data. Moreover, to avoid psychological harm to participants, it was emphasised that the results of the experiment would not be graded or recorded for their further academic assessment reports.

All teachers were informed of the importance and objectives of the study and asked to volunteer their assistance in participant recruitment and guidance to the appropriate classrooms. These

teachers, like other collaborators and participants, were asked to sign a consent form indicating that they were willing to accommodate the interruption of their daily classroom schedule as the test was to be administered during the normal classroom hours. The other collaborators, such as statisticians and data coding collaborators, were asked to sign a confidentiality agreement which required them to understand that any information contained in the data is confidential. In the following sub-section, the data analysis procedures and methods are presented.

5.3.6 Methods for data analysis and presentation

This study, as it was introduced in the research design section, is mostly a quantitative design. Thus, the data for this study are continuous ordinal data in terms of correct and incorrect scores for each article use. Therefore, quantitative analysis methods were employed. Firstly, the task for each individual participant was scored following a previously formulated marking scheme which was formed with the help of the answers obtained from the pilot study.

Then, a coding system or a pre-coding (Revesz, 2012) for data entry in the SPSS software for all the responses was formulated. The response for a definite article was coded as 1, while an indefinite response was coded as 2. The Zero article responses were coded as 3 and 4 was the coding for a response which is not an article (operationalized, henceforth as, other forms). Finally, an instance where the respondents failed to provide any article was operationalized as omission and coded as 5. In this study, which sought to understand the characteristics and the nature of multilingual interlanguage development, both correct and incorrect scores were valued as research information. This helped to investigate the extent to which a learner, for example, uses definite articles in the obligatory context of the indefinite or zero article; and vice versa.

Moreover, the nominal variables which needed codes before entering the data into the SPSS software were the independent variables. There were three independent variables considered

during analysis. The core one was multilingual acquisition which has already been operationalized in this study as concurrent acquisition which differentiates between or compares the data for those who are learning both English and French (operationalized as L3 group) and the ones who learn English only (operationalized as L2 group).

Therefore, the L3 group was coded as 1 and the L2 group was coded as 2. Another independent variable was the length of instruction to the target languages. This was operationalised as class level, where form two was coded as 1, form three as 2 and form five as 3. The last independent variable which was considered was test versions. This factor helped to discriminate between the data from the English version and the French version of the task, especially for the paired sample analysis of the form two L3 group participants.

After the coding of the respondents' responses and the independent variables, the process for data entry followed. Firstly, for the analysis of definite fluctuation tendency and interlanguage characteristics, all 60 questions for English test version and all 70 questions for French test version were entered in the software, as the dependent variables for each individual participant following the coding system for correct and incorrect codes. Therefore, all correct and incorrect responses for each type of article as well as the places where the respondents avoided were read by the software.

Through the use of the SPSS transform and then compute variable functions, the sum of the scores for each individual was computed and new columns of total scores for each dependent variable were read by the SPSS software. Afterwards, the transform-combine functions were used to divide the data set into three different data set categories. Category one included the data sets for form two groups, the L2 group (L1 Swahili-L2 English) and the L3 group (L1 Swahili-L2 English-L3 French). This included three data sets respectively to obligatory context for definite article, indefinite and zero. Category two included the data sets for the form two

L3 group (L2 English and L3 French learners) where analysis required paired methods. The third data set was for the L3 groups in the L3 French DP analysis by the factor of the class level. Dividing the data set into three categories was important for a statistical analysis because each category group needed a different statistical test especially for answering each individual research question. The treated variables were correct and incorrect definite, correct and incorrect indefinite, correct and incorrect zero article as well as omission and other forms. It should be noted that the omission variables were all instances where the respondents avoided to submit any form of an article, and other forms were all substitutions with a form which is not an article.

With the help of the analysis-compare means tabs, the descriptive summary for the usage of each article was derived in terms of sum, mean, standard deviation and percentage scores. This was done for each data set previously presented in the above paragraph. The first data set involved 60 participants, the 30 English L2 learners and 30 L2 English and L3 French learners. The second data set included from two 30 participants (L2 English and L3 French learners) who were analysed as a paired sample by the factor of test versions. The third data set involved 90 participants, who are all concurrent learners of English and French by the factor of class level.

In order to answer research question four, the analysis of grammatical number marking needed a separate coding and data entry into the software. Therefore, correct number marking was coded as 1, while the incorrect use of the same was coded as 2. Equal number of target spaces for number use was considered. There were 10 targeted spaces for number marking in both French and English test versions.

In the French task, the singular form was taken as a default form while a plural form was considered for measurement. Therefore, a participant was evaluated as able to mark

grammatical number if they were able to detect the plural form of an article for the given plural noun. It should be noted that the targeted contexts for number marking were only analysed in ten sentences from the first three parts of the task. For the last part, which was an open-ended task, it was not simple to track the equal number of target use for number marking. Therefore, the last part of the task was eliminated in this analysis.

Examples of the sentences in the French test where grammatical number marking was targeted are given below for reference.

(5.7) *Il y avait des motos dans le parking....*
 There were **indef-PL cars** in the parking...
 ‘There were cars in the parking....’

(5.8) *Il est allé s'acheter des chaussures.*
 He went to buy **indef-PL shoes**
 ‘He went to buy shoes’

(5.9) *Les enfants aiment les bonbons*
 children like **def-PL sweets**
 ‘Children like sweets’

(5.10) *Les cigarettes ne sont pas bonne pour la santé.*
def-PL cigarettes are not good for def health
 ‘Cigarettes are not good for health’

In the English task, the singular form was also taken as a default form and the plural form contexts were measured. The context where plural forms were targeted are (i) in sentences where a plural indefinite noun was used and therefore a zero article was obligatory, (ii) in the sentences where a plural definite noun was used and therefore a definite article was obligatory, and (iii) in the sentences where general and non-count nouns were used, and a zero article was obligatory. The four sentences below are plural target examples from the English test version.

(5.11) There were *motorcycles* in the parking
 there were **Ø-PL motorcycles** in the parking (indef-non-specific-plural noun)

- (5.12) Therefore, *the cars* of my brothers parked....
therefore, **def-PL cars** of my brothers parked....(definite-specific-plural noun)
- (5.13) The cat can climb *trees*
the cat can climb **Ø-PL trees** (zero-article with general plural noun).
- (5.14) But *the dogs* which we took to hunt ...
but **def-PL dogs** which we took to hunt ... (definite specific plural noun)

After the coding and data entry for number marking, the same process of data manipulation and analysis, with the use of the SPSS function tabs, was used for the correct and incorrect use of grammatical number. All data was analysed quantitatively. However, for research questions four and five where the number marking transfer and the characteristics of interlanguage development of a multilingual learner had to be examined, the interlanguage utterances which the learners produced in different levels were also presented.

In addition, analysis for research question one considered 34 obligatory contexts for definite, 13 obligatory contexts for indefinite and 13 obligatory contexts for zero article form. But, analysis for research question two considered equal contexts of each article form between the English and French test versions. Therefore, 34 obligatory contexts for definite and 13 obligatory context for indefinite article forms were analysed. Moreover, the zero-article form was eliminated since French test version had only four obligatory contexts which were set as distractors as, in most cases, French does not allow zero article form. For research question three, where only data from the French test version were considered, all 38 obligatory contexts for definite article form and 18 obligatory contexts for indefinite article form were analysed. Again the 4 obligatory contexts for zero article form were eliminated in this analysis.

Thus, different non-parametric statistical tests (see Larson-Hall, 2012; 2010) were also considered to see if the results are statistical on top of the descriptive analysis. The use of non-parametric statistic tests was considered as the current research sample was considered too

small for normal distribution analysis. The type of statistical tests run and the findings they suggest are presented and discussed in detail in chapters five and six, respectively.

The presentation of the findings is done in terms of raw counts, percentages, mean or mean ranks. Tables, charts and graphs are also used for visual presentation and description. In addition, textual presentations which contain some examples of learners' interlanguage utterances are presented to support and substantiate the quantitative report. In the following sections, the solutions to challenges, especially during the field work, are presented before providing the chapter's concluding remarks.

5.4 Solutions to challenges in the field

There was one major challenge during the fieldwork. This challenge was a result of the sampling procedures. In Tanzania, all schools teach English and use such a language as a language of instruction and learning. But the French language is taught as an optional subject from form three and not all schools offer such the subject.

Therefore, when form two L2 English participants were sought, there were more than 90 participants who were ready to participate and who were eligible, as far as the characteristics of the required sample were concerned. But the required number for L2 English group was only 30 participants. So, in such a situation, probability sampling was used by putting only thirty cards with a 'yes' label in the box and another sixty cards with a 'no' label. The students who picked the card with 'yes', were automatically selected as the sample while the other ones were informed that they had lost such a chance.

Another challenge was based on sampling of the L3 French groups. Contrary to the L2 English group, the number of learners who take French is small in each school compared to the previously proposed number. Formerly, the study aimed to use 40 participants for each group.

But due to this challenge, the number was reduced to 30 participants per group. Yet, it was difficult to get 30 participants in only one school. Therefore, for form three and form five, to get 30 participants for each group it required collecting data from two schools. Thus, form three participants were obtained from Dar es Salaam secondary school and Zanaki. While form five participants came from Korogwe and Milambo.

5.5 Concluding remarks for chapter five

This chapter has provided a presentation of the methods employed in the current study. It has presented research designs and research data collection and analysis methods. The chapter highlights that the current study used a quantitative design and thus, the quantitative methods were vital. However, there are instances where qualitative data were consulted. In the analysis of the fourth research question, the quoting of respondents' utterance was seen as important. Therefore, it should be noted that, although the current research is quantitative in nature, some of the information is worth reporting as non-quantified data to support the quantified report. Following this chapter is chapter five and six which describe the analysis, presentation and discussion of the findings. These chapters are organised on the basis of the content of each research question.

CHAPTER 6

EFFECT OF CONCURRENT ACQUISITION: DATA, FINDINGS AND DISCUSSION

6.1 Introduction

This chapter presents the findings and discussion of the data relating to research questions one, two and three. It should be noted however that a comprehensive discussion of how data was analysed is given generally in chapter five. In the current chapter, and the subsequent one, analysis procedures regarding only each specific research question are provided. Before presenting the results and discussion, the three research questions are repeated here from section one, for a reader to follow the presentation easily. The first research question is:

- i To what extent is production of L2 English articles affected by the concurrent acquisition of two foreign languages, with respect to the (in)definiteness fluctuation tendency

This research question (as explained in chapter one) has its background in the Fluctuation Hypothesis (FH) which is also presented in detail in chapter two. The FH states that L2 learners who speak an article-less first language, will use definite articles in place of indefinite articles and vice versa while marking the L2 definiteness and specificity contexts (Ionin 2003, Ionin, Ko & Wexler, 2004).

While this hypothesis holds true in some L2 and L3 acquisition studies, the current study did not objectively set out only to test it, but also to investigate the extent to which the concurrent acquisition of two non-native languages could modify the presupposed fluctuation tendencies, especially in multilingual acquisition perspectives. Regarding the assumption that multilingual acquisition is complex, it was predicted in the current study that the effects of the concurrent acquisition process would be revealed in the production and use of the L2 English articles.

Therefore, concerning research question one (as presented above), the prediction was that the learners who acquire only L2 English would not outperform their peers in L2 English article

production because, according to the metalinguistic awareness perspective (Jessner 2006), their counterparts who acquire both L2 English and L3 French are regarded as experienced language learners. In other words, the learners who learn both L2 English and L3 French concurrently were not expected to fluctuate in their use of the L2 English definite and indefinite articles in the same fashion as their counterparts who learn only an L2 English.

The second research question was set to further clarify the difficulties assumed to be entailed in acquiring two or more languages concurrently. The second research question is:

- ii To what extent does production of L2 English and L3 French articles differ, with respect to the (in)definiteness fluctuation tendency, when these languages are acquired concurrently?

Therefore, it was predicted that the L3 group would not fluctuate between the L3 French indefinite and definite article production as they do in their L2 English. Instead, their linguistic awareness and the cross-linguistic influence factors were predicted to positively influence the L3 French acquisition of DPs headed by articles. In addition, the influence from L2 English on the acquisition of L3 French was expected because both English and French have article systems.

In line with the research questions one and two, a need to control for the level of instruction or years of exposure to L3 was vital. Therefore, a third research question was formulated, namely:

- iii To what extent does length of exposure affect the production of the L3 French articles in terms of the (in)definiteness fluctuation tendency, regardless of the concurrent acquisition factor?

It was predicted, regarding the length of instruction, that the (in)definiteness fluctuation tendency in L3 French by the learners who learn both L2 English and L3 French, would decrease with an increase in the length of instruction, regardless of the concurrent acquisition factor.

The remainder of the current chapter is organised as follows. Section 6.2 presents the findings and discussion in relation to the effect of concurrent acquisition on L2 English article use. Findings and discussion in relation to the effects of the concurrent acquisition of L2 English versus L3 French article use follows in section 6.3. Then, section 6.4, which presents the concerns about the effect of length of instruction on L3 French article use, is followed by section 6.5, which gives the concluding remarks of this chapter.

6.2 Effect of concurrent acquisition on L2 English article use

To address research question one, the written data on L2 English articles by the learners who learn only L2 English versus those who learn both L2 English and L3 French, was comparatively analysed using IBM-SPSS version 20. With the aim of determining if concurrent acquisition of two foreign languages would be a factor for the (in)definiteness fluctuation tendency, the data included only the production of L2 English definite, indefinite and zero article forms.

The rest of this section is presented in three subsections. Subsection 6.2.1 presents the findings in relation to article use in definite article contexts. Subsection 6.2.2 presents the findings in relation to article use in indefinite article contexts and the penultimate subsection 6.2.3 presents the findings in relation to article use in zero article contexts. Finally, the discussion in relation to L2 English article production between the learners who learn only the L2 English and those who learn this language concurrently with the L3 French is presented in subsection 6.2.4.

6.2.1 L2 English article use in definite article contexts

Results of the data produced by the L2 and the L3 groups in respect of the use of English articles in definite article contexts are presented below in Table 6.1 and substantiated with examples. It should be noted that the definite article contexts were all places in the test where

the learners were expected to use the definite article form. In addition, it should be noted and remembered that all definite contexts in this study were defined as [+SR +HK]¹⁴, as all definite article forms were set to refer to specific referents. Moreover, as it was presented in the methodology chapter, there were 34 contexts in the English test version where the learners were expected to use obligatorily the definite article form. Therefore, for the 34 contexts, a total of 1020 raw token counts were collected and analysed.

Table 6.1 Percentage and Raw Tokens in the Definite Article Contexts [+SR +HK]

Article Form	L2 Group	L3 Group
Definite	452 (44.3%)	300 (29.4%)
Indefinite	430 (42.1%)	590 (57.8%)
Zero article	132 (12.9%)	104 (10.1%)
Other Forms	3 (0.29%)	10 (0.98%)
Omission	3 (0.29%)	16 (1.56%)
Total	1020 (100%)	1020 (100%)

Results in Table 6.1 above show that both groups tended to use the indefinite article, zero article or other forms in places where the definite article form was obligatory. In addition, both groups sometimes avoided producing an article of any kind. However, an initial look at the percentages presented here show that a difference between the group results exists. Initially, the L2 group participants seem to be correct in their definite article use, correctly using definite articles 44.3% of the time, while their counterparts correctly produced definite articles only 29.4% of the time. Moreover, while the L3 group participants used the indefinite article more often in place of the definite article, producing an incorrect indefinite article 57.8% of the time, the L2

¹⁴ The detailed presentation about this classification is given in theoretical chapter three.

group participants used the indefinite article in place of the definite article only 42.1% of the time. Although the scores for the use of zero article in place of definite form show this to be used more by the L2 group participants than the L3 group participants (12.9% versus 10.1%), the use of other forms in place of the definite article seems to be higher in the L3 group than their counterparts (0.29% versus 0.98%) and in the places where the participants avoided using any kind of article form, the L3 group also led by 1.56 %.

Some interlanguage utterances in relation to the quantitative results just presented above are presented below. These are examples of the use of indefinite article, zero article, other forms and omission in definite article contexts by both groups. In these examples, the DP interlanguage forms (a noun and its D-category or an article form) is bolded and italicized. In addition, the incorrect article form is marked with an asterisk. Below each interlanguage utterance, a participant code is provided.

- (6.1) give me **a pen* which is on the table
 give me *indef pen* which is on the table
 (Participant: FII. L2 group. TBR. 02)
- (6.2) *I saw a dog.* **a dog* run away.
 first mention. *indef dog* run away.
 (Participant: FII. L2 group. TBR. 05)
- (6.3) Lake Victoria is **a biggest lake* in East Africa
 Lake Victoria is *indef biggest lake* in East Africa
 (Participant: FII. L2 group. TBR. 13)
- (6.4) **Give me *Ø pen* which is on the table
 Give me *zero-article pen* which is on the table
 (Participant: FII. L2 group. TBR. 06)
- (6.5) There were motorcycles in the parking. Therefore, **some cars* ...
 There were motorcycles in the parking. Therefore, *other form cars* ...
 (Participant: FII. L2 group. TBR.14)
- (6.6) I saw a dog. **----- dog* run away
 I saw *a dog. omission dog* run away
 (Participant: FII. L2 group. TBR. 22)

- (6.7) give me **some pen* which is on the table
 give me *other form pen* which is on the table
 (Participant: FII. L3 group. NGR. 09)
- (6.8) **a dogs* which we took to hunt yesterday failed
indef dogs which we took to hunt yesterday failed
 (Participant: FII. L3 group. NGR. 07)
- (6.9) Therefore, ** \emptyset cars* of my brothers ...
 Therefore, *zero-article cars* of my brothers ...
 (Participant: FII. L3 group. NGR. 16)
- (6.10) the cars of my brothers parked in front of **an house*
 the cars of my brothers parked in front of *indef house*
 (Participant: FII. L3 group. NGR. 22)

To see if the above difference between the two groups was statistically significant, the non-parametric two tailed Mann-Whitney U test was run. Results from this test revealed that the L2 group participants significantly outperformed the L3 group participants in the use of the definite article. In fact, the test showed that the L2 group participants produced the correct definite article significantly more than the L3 group participants (U=125, mean ranks=41.3 vs.19.6, Z=-4.8, p=.000) and that they overused the indefinite article in place of the definite article significantly less than the L3 group participants (U=136, mean ranks=20.03 vs. 40.97, Z=-4.6, p=.000).

6.2.2 L2 English article use in indefinite article contexts

Table 6.2 below presents results with respect to the L2 English article use in the indefinite article contexts. Contrary to the definite article, the indefinite article context is defined in this study as [SR -HK] because all indefinite articles were targeted to mark non-specific nouns. In addition, there were 13 obligatory contexts in the test where the participants were expected to use indefinite article form. Therefore, in 13 target contexts, 390 raw tokens were produced and analysed for each group.

Results in Table 6.2 below initially show that both groups used the definite article and the zero-article in places where an indefinite article was obligatory. However, as in the definite article contexts, the L2 group participants seem to outperform the L3 group participants in terms of the correct use of the indefinite article by 55.1% versus 49.4% produced by their counterparts. In the incorrect use, the L2 group participants incorrectly used the definite in place of the indefinite only 31.3% while the L3 group participants scored 43.8%. Regarding the zero-article usage in place of the indefinite article, the L3 group participants were a bit less at 5.1% than the L2 group participants who did that at 13.3%. However, the L3 group participants again led in the use of other forms by 0.25%, admittedly only one occurrence, and avoided producing any form of article 1.28% of the time.

Table 6.2: Percentages and Raw Token Counts in Indefinite Article Contexts [-SR -HK]

Article Form	L2 Group	L3 Group
Indefinite	215 (55.1%)	193 (49.4%)
Definite	123 (31.5%)	171 (43.8%)
Zero article	52 (13.3%)	20 (5.1%)
Other Forms	0 (0%)	1 (0.25%)
omission	0 (0%)	5 (1.28%)
Total	390 (100%)	390 (100%)

Corresponding to the results presented in Table 6.2 above, below are some examples of the article forms which each group produced in place where an indefinite article was to be used.

(6.11) I saw ** \emptyset* *dog*. The dog run away.
 I saw *zero-article* *dog*. The dog run away
 (Participant: FII. L2 group. TBR. 25)

(6.12) I am looking for **the* *manager*. Any manager
 I am looking for *def* *manager*. Any manager.
 (Participant: FII. L2 group. TBR. 03)

(6.13) I saw **the* *dog*. The dog run away.
 I saw *def* *dog*. The dog run away.
 (Participant: FII. L2 group. TBR 11)

(6.14) AZAM will reward **the winner*. They have to wait until the match is finished
 AZAM will reward *def winner*. They have to wait until the match is finished
 (Participant: FII. L3group. NGR. 20)

(6.15) I saw **the dog*. The dog run away.
 I saw *def dog*. The dog run away
 (Participant: FII. L3group. NGR. 24)

(6.16) I bought **the magazine*. The magazine was about economic crisis
 I bought *def magazine*. The magazine was about economic crisis
 (Participant: FII. L3group. NGR. 30)

The Mann-Whitney U test was again conducted to see if the above differences were statistically significant. The test revealed that the difference in the use of indefinite article between the L2 group and the L3 group was significant. In fact, the L2 group showed a significantly high level of correct performance in producing indefinite article forms (U=332, mean ranks=34.4 versus 26.5, Z=-1.7, p=.078) and lower level of overproducing definite articles in place of indefinite ones (U=225, mean ranks=23.02 vs.37.98, Z=-3.3 p=.001). In the following subsection, results with regard to article use in zero article contexts are presented.

6.2.3 L2 English article use in zero article contexts

In the contexts where a zero article was to be used, the L2 group and the L3 group participants sometimes produced definite or indefinite articles such as the following:

(6.17) **the water* is necessary for life
def water is necessary for life
 (Participant: FII. L2group. TBR. 08)

(5.18) There were **a motorcycles* in the parking
 There were *indef motorcycles* in the parking
 (Participant: FII. L3group. NGR. 15)

(6.19) A cat can climb **a trees*
 A cat can climb *indef trees*
 (Participant: FII. L3group. NGR. 22)

The quantitative results with respect to the above use of the zero article are presented in Table 6.3 below in raw tokens and percentages.

Table 6.3 Percentages and Raw Token Counts in Zero Article contexts

Article Form	L2Group	L3Group
Zero article	81 (20.7%)	97 (24.8%)
Definite	153 (39.2%)	170 (43.5%)
Indefinite	143 (36.6%)	122 (31.2%)
Other forms	2 (0.5%)	1(0.2%)
Omission	11 (2.8%)	0 (0%)
Total	390 (100%)	390 (100%)

These results at first glance show that the L3 group participants have, to some extent, a better knowledge of the use of the zero article (24.8% versus 20.7%). This also was revealed in the incorrect use of the zero article in the previous analysis where the definite or indefinite article forms were obligatory. On the contrary, with respect to the use of the definite or indefinite articles in places where a zero article was obligatory, the L3 group participants seem to use the definite article form more than the L2 group participants (43.5% versus 39.2%), while the L2 group participants seem to use the indefinite more than the L3 group participants (36.6% versus 31.2%). In addition, the L2 group showed a tendency of omission of 2.8% and the use of other forms of 0.5%.

The Mann-Whitney U test was also conducted to see if the differences presented above were statistically significant. The results from this test showed no statistically significant difference between the groups with respect to the use of the zero article. For the correct use of the zero article, the test results showed no significant difference ($U=282$, mean ranks= 28.2 versus 32.7 , $Z=-1$, $p=.307$); for the use of the definite article in places of the zero article ($U=369$, mean ranks = 27 versus 33 , $Z=-1.2$, $p=.208$) and for the use of the indefinite article in place of the zero article ($U= 369$, mean ranks= 33 versus 27 , $Z=-1.2$, $p=.225$). Thus, from these results, it

can be concluded that, both groups performed in the same fashion in the use of the zero-article form. In the following subsection, the overall discussion about the effect of concurrent acquisition on the use of the L2 English article is provided.

6.2.4 Discussion of the L2 English article use findings

Results presented in Table 6.1, Table 5.2 and Table 6.3 above, and results from Mann-Whitney U tests reveal that learners who are learning an L2 alone or those who are learning an L2 side by side with an L3, both initially fluctuate in their use of the L2 articles. However, those learners who learn only an L2 appear to be more accurate in their use of the L2 articles than their counterparts who learn the L2 concurrently with an L3.

On the one hand, since English is the second language of both groups, the fluctuation tendency observed in the current results can be taken as a support for the Article Choice Parameter (ACP) and the Fluctuation Hypothesis (Ionin, 2003; Ionin, Ko and Wexler, 2004). These results are also similar to the findings found by Kimambo (2016) with respect to the L2 English learners who speak L1 Swahili. On the other hand, a question might arise: Why is there a difference in performances between the two groups when both groups possess the same characteristics with regard to their linguistics background and their level of instruction in the L2 English? Based on the current results, the answer could be attributed to the effect of the concurrent acquisition.

Therefore, from the current results it can be concluded that the group of the learners who learn only L2 English have outperformed their counterparts who learn both L2 English and L3 French because participants from the latter group struggle to develop the two systems concurrently. Eventually, this concurrent acquisition complicates the acquisition process and slows it down.

The current results are different from the results obtained from some previous studies. For example, both Leung (2005; 2007; 2008) and Kullundary and Gabrielle (2012) found that the L3 group outperformed the L2 group. These studies concluded that transfer on an L3 comes from an L2 rather than from an L1. However, their analysis was based on L2 and L3 groups of the same target language and their studies focussed mainly on the cross-linguistic influence. On the contrary, the current results converge with the results obtained from other previous studies which focussed on the effects of linguistic awareness on the acquisition of an L3. According to a linguistic awareness perspective, a learner who learns or speaks many languages is hypothesized to possess the ability, experience and greater awareness of how languages are structured (Jessner, 2006).

If linguistic awareness could be at play in the current study, the participants who learn English and French concurrently would outperform their counterparts who learn only L2 English. Unfortunately, the current results have revealed the opposite. Likewise, Gibson, Hufeisen and Libben (2001) concluded that having many linguistic systems is an interference to L3 acquisition because their L3 participants, who knew two foreign languages, did not reveal any advantageous performance compared with the performance of their counterparts who learned only one foreign language. These authors termed this as “foreign language confusion” (Gibson, Hufeisen and Libben, 2001:155).

The current results also suggest that foreign language confusion was at play regarding the concurrent multilingual learners of both English and French. In other words, the current results do not support the ideas presented in the metalinguistics awareness theory (Jessner, 2006), that a multilingual learner is an experienced language learner who is expected to show greater competence in the languages s/he acquires. Although the role of metalinguistic awareness had previously been supported by some consecutive multilingual acquisition studies, it is disproved

by the current results. This may be because the current results were obtained from a concurrent multilingual acquisition perspective.

Thus, these results can be taken as a proof for the assumption that the consecutive multilingual acquisition is a different acquisition process from the concurrent multilingual acquisition process. The current results suggest that the linguistic and language learning experience which are expected in acquiring an L2 in succession to an L2 can be limited when both L2 and L3 are acquired almost side by side.

From the Dynamic Model of Multilingualism (DMM) perspective (Herdina and Jessner, 2000; 2002), the learners who concurrently learn both English and French lag behind in developing their L2 because they struggle to develop the L2 system side by side with the L3. Moreover, the two systems influence each other and, without the availability of enough resources and time for maintaining them, the acquisition process of all or one system slows down. Therefore, acquiring two or three non-native languages side by side can create a learning burden to a learner instead of being a resource for enhancing subsequent language acquisition. In the following section, the presentation is turned to the analysis and the findings in relation to research question two.

6.3 Effect of concurrent acquisition on L2 English versus L3 French article use

As it was presented previously, the difference between L2 English and L3 French article use was researched under research question two which sought to understand if the concurrent acquirers of both L2 English and L3 French foreign languages would show any difference in (in)definiteness fluctuation tendency between their production of L2 English and L3 French articles. The prediction regarding this question was that the learners who learn both L2 English and L3 French will not fluctuate in their L3 French as much as they do in their L2 English. Therefore, both L2 English and L3 French written data on article use were analysed through

the paired sample methods in IBM-SPSS version 20. The same coding system procedures as discussed previously were employed and helped in computing the sum, mean and percentages of the use of articles. However, there were an unequal number of zero article contexts between the English and French test versions. Therefore, only the use of articles in definite and indefinite article contexts was analysed.

Thus, a total of 1020 raw token counts for definite article contexts and 390 raw token counts for indefinite article contexts, respectively, for each test version were analysed. Results are presented in the rest of this section as follows. Results of article use in definite article contexts are presented first in subsection 6.3.1, followed by subsection 6.3.2 which presents results of the article use in indefinite article contexts. Then, subsection 6.3.3 provides an overall discussion about the effect of concurrent acquisition on the production of the L2 English and the L3 French article use.

6.3.1 L2 English versus L3 French article use in definite article contexts

Table 5.4 below presents results of the use of L2 English and L3 French articles in definite article contexts by the learners who learn both L2 English and L3 French. At first glance, Table 5.4 reveals that the learners who learn both L2 English and L3 French performed at least better in L2 English than in L3 French definite article use. In fact, these results show that these learners scored higher in correctly using the definite article form in L2 English than in L3 French. In addition, their tendency for using the indefinite article, zero article, other forms, or omission in a place where the definite article form is obligatory seem to be more in L2 English than in L3 French. Because some examples of the L2 English article fluctuation by the L3 group participants are provided in the previous subsections, only some examples of the L3 French article fluctuation by the L3 group participants are provided in this subsection and the subsequent one.

Table 6.4 Article Use in Definite Article Context by L3 Group

Test Version		Def	Indef	Zero Article	Other Forms	Omission
English Test	Mean	10.00	19.67	3.47	.23	.53
	N	30	30	30	30	30
	%	29.4%	57.8%	10.1%	0.9%	1.5%
	Sum (/1020)	300	590	104	10	16
French Test	Mean	9.80	17.27	2.43	4.30	.10
	N	30	30	30	30	30
	%	28.8%	50.7%	7.1%	12.6%	0.29%
	Sum (/1020)	294	518	73	129	3

(6.20) **une voiture de mon frère est garée en face de la maison*
indef car of my brother parked in front of the house
 ‘**a car* of my brother parked in front of the house’
 (Participant: FII. L3group. NGR. 01)

(6.21) *la voiture de mon frère est garée en face d’ *une maison*
 the car of my brother is parked in front of **indef house**
 ‘the car of my brother is parked in front of **a house*’
 (Participant: FII. L3group. NGR. 22)

(6.22) **Passe-moi *une tasse qui est sur la table*
 give me **indef cup** which is on the table
 ‘give me **a cup* which is on the table’
 (Participant: FII. L3group. NGR. 03)

(6.23) **Il y avait des motos dans *un parking*
 There were motorcycles in **indef parking**
 ‘there were motorcycles in **a parking*’
 (Participant: FII. L3group. NGR. 15)

(6.24) *J’ai vu un chien dehors. *Un chien a fui*
 I saw a dog outside. **indef dog** run away
 ‘I saw a dog outside. **A dog* run away’
 (Participant: FII. L3group. NGR. 19)

(6.25) *Passe-moi *de tasse qui est sur la table*
 Give me **poss cup** which is on the table
 ‘give me **of cup* which is on the table’
 (Participant: FII. L3group. NGR. 05)

To see if the results presented in Table 6.4 above are statistically significant, the Wilcoxon Signed Ranks test was conducted. The results from the test revealed that the correct use of the

L2 English definite article was not significantly different from the correct use of the L3 French definite article (mean ranks=13 vs.14, $Z = -.193$, $p = .847$). Moreover, the difference between the tendency of using the indefinite article form in place of a definite article in L2 English and L3 French revealed to be tending towards significance (mean ranks=18.1 versus.11.5, $Z = -1.9$, but $p = .054$). From these results it can therefore be concluded that these learners performed almost in the same fashion between their L2 English and their L3 French definite article use.

6.3.2 L2 English versus L3 French article use in indefinite article contexts

Results regarding the analysis of English versus French article use in indefinite article contexts are presented below in Table 6.5 in terms of mean, percentages and raw token counts. This table shows that in places where indefinite article use was obligatory, the L3 learners seemed to be using the definite article form more often in L2 English (43.8%) than in L3 French (31.7%). In addition, they showed a tendency of using other forms in place of indefinite articles more often in L3 French than in L2 English (11.2% versus 0.2%). Furthermore, they used the indefinite article form more accurately (54.1%) in L3 French than in L2 English (43.8%). Sample examples of the French article fluctuation by the L3 group participants are provided before table 5.5.

- (6.26) **On utilise aussi* ***les feuilles** *dans la préparation*
 We use also **def firewood** in the preparation
 'We also use ***the firewood**'
 (Participant: FII. L3group. NGR. 30)
- (6.27) *Il y avait* ***les motos** *dans le parking*
 There were **def motorcycles** in the parking
 'there were ***the motorcycles** in the parking'
 (Participant: FII. L3group. NGR. 24)
- (6.28) *Il travaille avec* ***les copines**. *Je ne connais pas ces copines.*
 He works with **the friends**. I do not know those friends
 'He works with ***the friends**. I do not know them'
 (Participant: FII. L3group. NGR. 07)

Table 6.5 Article Use in Indefinite Article Contexts by L3 Group

Test Version		Def	Indef	Zero Article	Other Forms	Omission
English Test	Mean	5.7	6.4	0.6	0.03	0.17
	N	30	30	30	30	30
	%	43.8%	49.4%	5.1%	0.2%	1.2%
	Sum (/390)	171	193	20	1	5
French Test	Mean	4.1	7.0	0.3	1.4	00
	N	30	30	30	30	30
	%	31.7%	54.1%	2.8%	11.2%	0%
	Sum (/390)	124	211	11	44	0

From the results presented in the table above, it can be, at first glance, concluded that the L3 group performed better in their L3 French rather than in their L2 English indefinite article use. However, when the Wilcoxon Signed Ranks Test was run, the results showed, on one hand, that the accurate production of L3 French indefinite article was not significantly different from the production of the L2 English indefinite article (mean ranks=11.6 versus 17, $Z = -.813$, but $p = .416$). On the other hand, the L3 group performed significantly differently between the production of the definite article in place of the indefinite article in L2 English versus L3 French (mean ranks=14.6 versus 10.2, $Z = -2.6$, $p = .008$). In fact, the tendency to use definite articles in places of indefinite articles was much more in L2 English than in L3 French article production. The discussion about these results is given in the following subsection.

6.3.3 Discussion of the findings of L2 English versus L3 French article use

In the definite contexts, results have shown that the L3 group performed alike between their L2 English and L3 French article use. However, in the indefinite contexts, the learners used the definite article in place of the indefinite more often in their L2 English than in their L3 French. Although the years of exposure and instruction in the L2 English are ahead of those in the L3 French, these learners did not show any advantaged performance in their L2 article usage. Their

L2 English interlanguage characteristics seemed to be the same as their L3 French interlanguage; especially in definite article use while in indefinite article use, they outperformed in L3 French.

The question that arises in relation to these findings is why do these learners show the same interlanguage characteristics in both L2 English and L3 French, or perform better in L3 French, while the years of exposure to these languages differ? On the one hand, we can simply conclude that it is because both languages are foreign languages to these learners, and therefore they can be termed as multiple L2 learners. On the other hand, the assumption that the concurrent acquisition of two non-native languages caused some complication and slowed down the L2 English development holds true. According to the DMM, the interdependency factor can be taken as the reason (Herdina and Jessner, 2000; 2002). Therefore, learners who learn English and French concurrently perform alike in both languages because their behaviour in their L2 and/or L3 depends on their behaviour in both languages. This means that the two systems affect each other. In addition, learning two foreign languages concurrently needs more time or effort for maintaining the development of both languages (Herdina and Jessner, 2000). Examples of language maintenance include chances and opportunities in which those languages are used for different purposes. Unfortunately, the participants of the current study maintain their L2 English and L3 French mostly at school. And sometimes much effort is employed in the learning of the L3 system which cause the L2 acquisition to lag behind. Therefore, such situations can cause deceleration regarding the development of one or all of the languages in question.

Although many previous L3 studies focussed on determining the effect of the previous known languages on the development of the subsequent one, some scholars who examined the development of both L2 and L3 have also revealed that there was no difference between the

L2 and the L3 interlanguages. For example, Leung (2008) showed that a learner who speaks an L1 which lacks the formal features present in L2 or L3 can still easily acquire those features in both L2 and L3.

Subsequently, Hsien-jen Chin (2009), who examined Chinese native speakers who have learned L2 English and were learning L3 Spanish, discovered that the L3 average scores on the Spanish morphology test were close to those of the L2 English test and the acquisition order revealed to be the same in both L2 and L3. Kullundary and Gabriele (2012) also concluded from a comparison between L2 Russian and L3 English performances that L3 acquisition is mostly influenced by L2, as the learners' performances in both L2 and L3 matched.

6.4 Effects of length of instruction on L3 French article use

The effect of length of instruction was examined through research question three. Briefly, research question three sought to uncover whether the length of instruction among the L3 French learners could still affect the definiteness fluctuation tendency in the L3 production of articles, despite the concurrent acquisition of the L3 French and the L2 English foreign languages. Moreover, it should be noted and remembered, as it was presented in the methodology chapter, that the length of instruction was taken as a proxy for general L3 French proficiency because the proficiency is considered to increase with length of instruction. Regarding question three, the written data on L3 French definite and indefinite articles which were produced by Form Two, Form Three and Form Five L3 French learners were analysed and compared through IBM SPSS version 20.

As in the previous analysis, the coding for definite, indefinite, zero articles, other forms and avoidance were used to get the counts of each article use respectively for definite and indefinite article obligatory contexts. Therefore, 1140 total tokens produced in 38 contexts for definite article, and a total of 540 tokens produced in 18 contexts for indefinite article, respectively, per

each individual class were analysed. The results in relation to the research question three are presented below in Table 6.6 and Figure 6.1 in subsection 6.4.1, as well as in Table 6.7 and Figure 6.2 in subsection 6.4.2. This section ends with subsection 6.4.3 which presents the discussion about the findings regarding the length of instruction.

6.4.1 The effect of the length of instruction in definite article contexts

Table 6.6 below presents results of the use of L3 French articles in contexts where the definite article form was obligatory. The results are in raw counts, percentages and mean scores.

Table 6.6 Means and Percentages L3 French Definite Article Use by L3 French Classes

Class Level		Def	Indef	Zero Article	Other Forms	Omission
Form Two	Mean	12.80	17.83	2.77	4.47	.13
	N	30	30	30	30	30
	%	33.6%	46.9%	7.2%	11.7%	0.3%
	Sum (/1140)	384	535	83	134	4
Form Three	Mean	19.13	13.10	3.13	1.73	.80
	N	30	30	30	30	30
	%	50.3%	34.4%	8.2%	4.5%	2.1%
	Sum (/1140)	574	393	94	52	24
Form Five	Mean	24.80	11.87	1.07	.00	.27
	N	30	30	30	30	30
	%	65.2%	31.3%	2.8%	0.0%	0.7%
	Sum (/1140)	744	356	32	0	8

Results in the above table reveal that the definiteness fluctuation tendency is decreasing with an increase in the length of instruction. In fact, the Form Two (lower-level class) fluctuated most of all groups by supplying the indefinite article form where the definite article form was obligatory in nearly half the contexts (46.6%, 34.4% and 31.3%; for the respective L3 French classes). The patterns of this tendency are also visually presented in Figure 6.1 where the

correct use of the definite article is high by the Form Five learners, while the use of the incorrect indefinite is high by the lower classes (Form Two and Three).

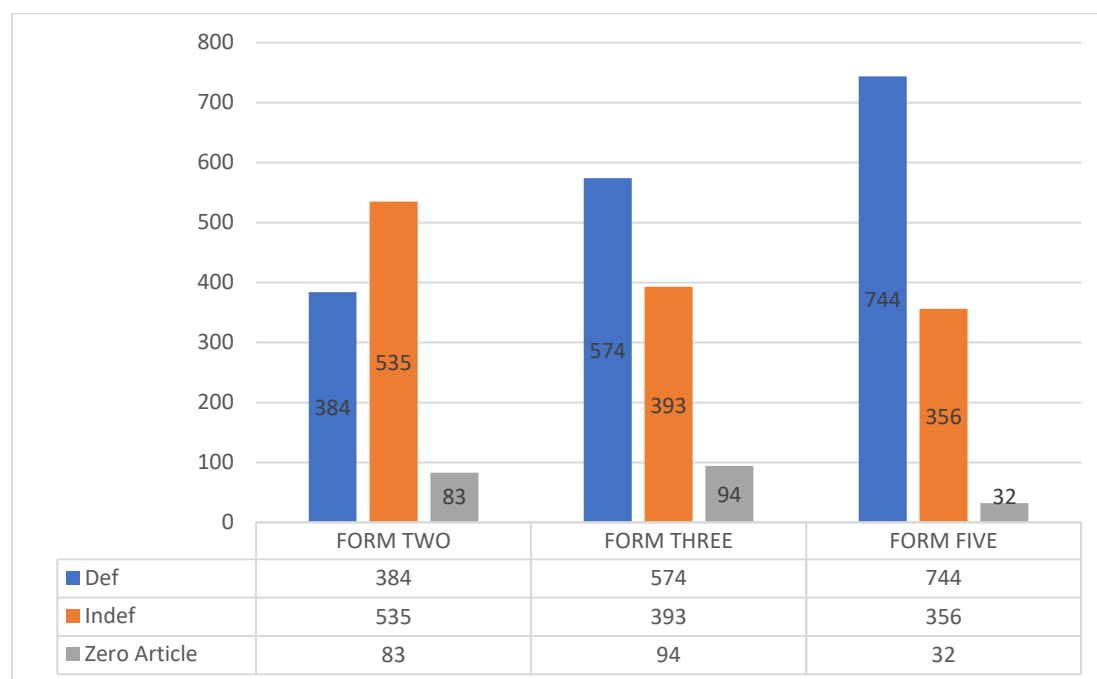


Figure 6.1 L3 French Article Use in Definite Article Context by L3 French Classes

6.4.2 The effect of the length of instruction in indefinite article contexts

Regarding the use of L3 French articles in indefinite article contexts, results are presented below in Table 6.7. Unlike the definite article use, results on the use of indefinite articles show something interesting regarding the correct use of the indefinite article and the incorrect use of the definite articles. It should be noted that the incorrect use suggests the use of an article form in a place where another article form was obligatory. Therefore, the definite incorrect use was the definite article forms which were used in place of indefinite ones and vice-versa. The incorrect use of zero article refers to all zero articles which were used incorrectly in the place where definite or indefinite articles were obligatory. In the previous Figure 6.1, the correct use of definite articles was increasing with an increase in the length of instruction, while the incorrect use of indefinite and zero articles showed a decrease as the years of instruction increased. However, Table 6.7 and Figure 6.2 reveal that the correct use of indefinite articles

drops at form three level and increases in form five, while the incorrect use of definite articles progressively increases as the years of exposure also increase.

Table 6.7 French Indefinite Article Use by L3 French Classes

Class Level		Def	Indef	Zero Article	Other Forms	Omission
Form Two	Mean	7.10	9.03	.43	1.37	.00
	N	30	30	30	30	30
	%	39.4%	50.1%	2.4%	7.5%	0.0%
	Sum (/540)	213	271	13	41	0
Form Three	Mean	7.50	8.77	.40	.57	.77
	N	30	30	30	30	30
	%	41.6%	48.7%	2.2%	3.1%	4.2%
	Sum (/540)	225	263	12	17	23
Form Five	Mean	8.10	9.70	.10	.00	.10
	N	30	30	30	30	30
	%	45%	53%	0.5%	0.0%	0.5%
	Sum (/540)	243	291	3	0	3

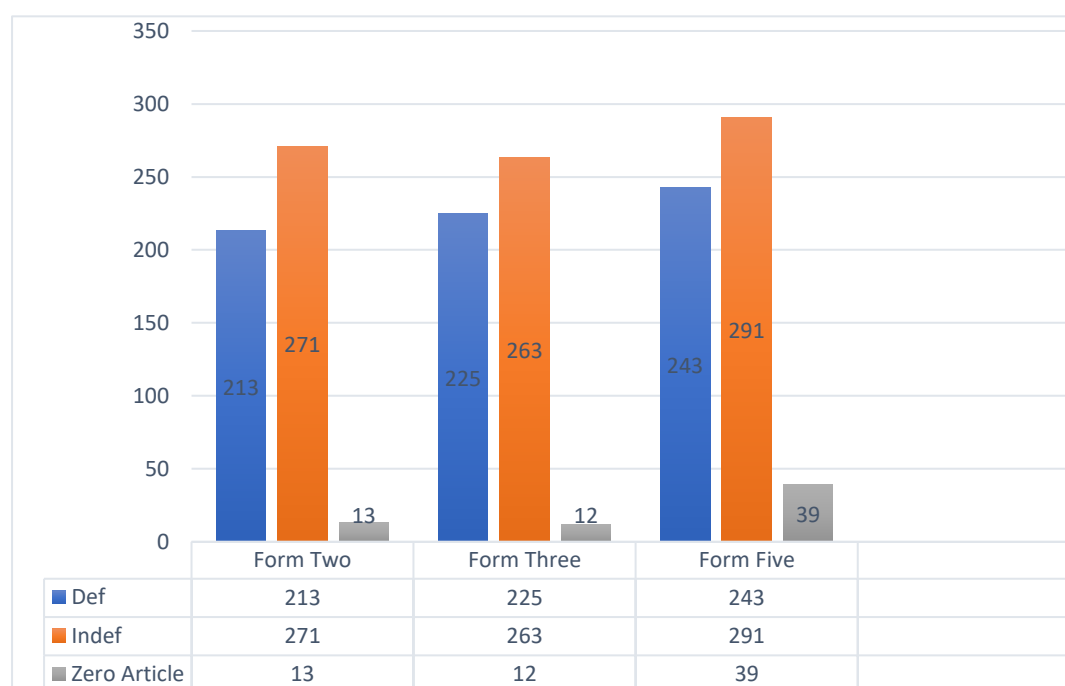


Figure 6.2 L3 French Article Use in Indefinite Article Context by L3 French Classes

The Kruskal-Wallis H test was conducted to see if the raw data presented above through subsections 6.4.1 and 6.4.2 are significant. Results from this test show that a difference in definiteness fluctuation tendency among Form Two, Form Three and Form Five L3 French groups is determined by the length of instruction.

On the one hand, the correct use of the definite article form progressed statistically significantly as the year of instruction increases ($\chi^2(2)=57.210$, $p=000$, mean ranks=19, 47.7 and 69.7, respectively to Form Two, Three and Five); while the length of instruction did not significantly determine the use of the correct indefinite article because the Form Two group performed a bit better than the Form Three group, although the Form Five, the highest group performed best ($\chi^2(2)=2.206$, $p=.332$, mean ranks=43.8, 41.5, 51.07, respectively to Form Two, Three and Five).

On the other hand, the incorrect use of the indefinite article was shown to be statistically significantly different as the years of instruction increases ($\chi^2(2)=23.801$, $p=.000$ mean ranks 64.03, 39.62, 32.85; respectively to Form Two, Three and Five). In fact, the use of the indefinite article in places where the definite article is obligatory, decreases as the year of instruction increases. However, the incorrect use of the definite article in places where the indefinite article was obligatory, increases with an increase in the year of instruction ($\chi^2(2)=46.417$, $p=000$ mean ranks 40.15, 44.45, 51.90; respectively to Form Two, Three and Five).

6.5 Discussion of the Findings

From the above findings, it can be concluded, firstly, that the article fluctuation tendency still holds in L3 language acquisition even though the L3 learners are acquiring two foreign languages concurrently. However, this tendency reveals to be one of the characteristics in the lower levels or initial state as it is proposed by Ionin (2003); Ionin, Ko and Wexler, (2004) in the L2 acquisition of articles. Secondly, the results support the argument held in the DMM that,

multilingual acquisition is non-linear (Herdina and Jessner, 2000; 2002) because both lower and higher levels groups showed a certain level of inaccuracy in their use of articles. In fact, while the lower-level learners showed to face some level of difficulties in using indefinite articles, their counterparts, the higher-level learners, showed difficulties in using the definite article. Thirdly, these findings also suggest that concurrent acquisition of two foreign languages is a complex acquisition process which seems to be a source of some difficulties even in the later years of exposure, or at a higher proficiency level.

6.6 Concluding remarks for chapter six

Presented in this chapter are the results and discussion concerning the effects of concurrent multilingual acquisition of two or more foreign languages. Based on research questions one, two and three, it has been shown that the concurrent acquisition of two foreign languages has some effects on the acquisition process of the languages in question. The results on definiteness fluctuation in L2 English, L2 English versus L3 French and L3 French by the class levels lend support for the assumption that fluctuation tendency in the acquisition of articles is not only triggered by the cross-linguistic difference between the L1 and L2, but also the complexity in the acquisition process. If SLA is complex, multilingual acquisition is more complex and adds some complexity to the process of acquisition.

Therefore, through these findings it can be concluded that concurrent acquisition of two or more foreign languages is a complex process which can slow down the acquisition of not only the L3, but also the L2. This was attributed to the Dynamic Model of Multilingualism (Herdina and Jessner, 2000; 2002) which states that multilingual acquisition involves dynamic multi-systems that affect each other. Therefore, concurrent acquisition of two non-native languages, is a system which affects the development of the two language systems in question.

In addition, it has been shown through this chapter that all the systems present in the process affect one another. This was evident with the current L3 participants who have the same L2 English acquisition level as their counterparts, but they seem to be outperformed in the use of the L2 English articles, and they show the same interlanguage characteristics in both L2 and L3. Overall, chapter five suggests that multilingual acquisition is a complex process which entails not only the influence of the previously acquired languages on subsequent systems, but also the influence of the languages being acquired on each other.

CHAPTER 7

DATA, FINDINGS AND DISCUSSION REGARDING TRANSFER AND INTERLANGUAGE CHARACTERISTICS

7.1 Introduction

This chapter presents the findings and discussion of the data regarding the transfer and interlanguage characteristics of L3 French. The relevant research questions are research questions four and five which are repeated here for the reader to follow easily:

- iv) What would be the source and form of the number marking transfer on L3 French by the L1 Swahili speakers also learning L2 English?
- v) What are the characteristics of L1 Swahili speakers' L3 French DP interlanguage development?

This chapter is organised as follows. Section 7.2 presents the findings and discussion of the transfer of number marking on L3 acquisition, addressing research question four. Then, the findings and discussion regarding L3 French interlanguage characteristics, addressing research question five, are presented in section 7.3. Finally, the chapter ends with the concluding remarks in section 7.4.

7.2 The source and the form of number marking transfer on L3 French

As it was reviewed and presented in previous chapters, previous language transfer on subsequent language learning is central and interesting in multilingual acquisition studies. This is because there is more than one language which can, theoretically, transfer to an L3. Therefore, whether transfer to an L3 comes from an L1 or an L2 has become debatable in multilingual acquisition studies. Different factors have also been proposed as determinants for an L1 or an L2 to transfer its structure to an L3. Among other factors, the typological relation between an L3 and an L2 or an L1 has been suggested from a combination of various languages.

Thus, the current analysis involves the combination of three languages: L1 Swahili, L2 English and L3 French. These languages differ in terms of their DP systems headed by articles. As discussed previously in chapter three, Swahili does not have articles like English and French. It also does not mark number features in the same way as in English or French. Although Swahili is said to have a DP system, it does not have DPs headed by articles. Moreover, English number marking structures are, at least typologically, perceived to be similar to the French number marking system. Although English number features are not overtly marked on articles, the occurrence of English articles sometimes depends on (the morphosyntactic) singular or plural forms of the noun that they modify (Lyons, 1999).

Therefore, research question four was specifically aimed at investigating whether number marking transfer on L3 French DP would come from L1 Swahili or L2 English and what form it would be. On the one hand, the assumptions held in previous multilingual acquisition models predict the L1 Swahili, being typologically different from both target languages, could not influence the subsequent learning. But L2 English being typologically closer to L3 French in terms of article and number systems, would trigger the L3 French number marking development. On the other hand, I predicted, given the design and methods of the current study, that the learners who learn both L2 English and L3 French (the L3 group) would show a similar tendency in their L2 English and L3 French number marking structures because the two languages are being acquired concurrently while their L1 Swahili is typologically dissimilar from both target languages. Thus, despite the typological similarity between the L2 English and L3 French, the complication involved in acquiring two languages side by side before an attainment of high proficiency in the L2 would cause some problems in the way the current learners mark number system in L3 French. In this sense, any number marking transfer on L3 French (whether from the L1 Swahili or from the L2 English) was expected to reveal as negative transfer or non-facilitative transfer.

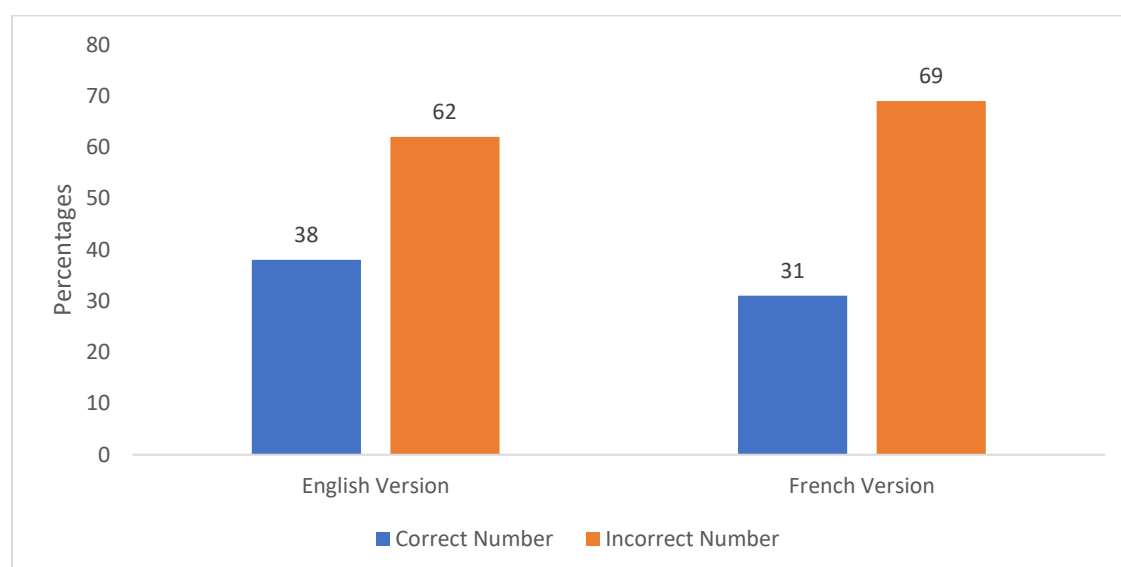
The analysis regarding the number marking transfer in this study was done by comparing the L2 English number marking production between the L2 and the L3 groups and, through paired sample methods, the data produced by Form Two participants in L2 English and L3 French were compared. As it was presented in chapter four, there were 10 obligatory contexts for each test version for supplying plural forms. Singular forms were taken as default forms. Therefore, in 10 obligatory contexts for the use of number marking, a total of 300 tokens from each test version were analysed quantitatively using IBM SPSS version 20. Then, the total correct and incorrect tokens for number marking, and the percentages calculated from these totals, were computed respectively for each test version. Finally, the Mann-Whitney (for comparing between the L2 and L3 groups) and the Wilcoxon signed ranks test (for paired sample for Form Two L3 group) were run to see if the results were significant. Results in relation to the form and source of L3 number marking transfer are presented below in Table 7.1 and Figure 7.1 and supplemented by some examples of interlanguage utterances which the participants produced in L3 French. Table 7.1 below reports the L2 English number marking produced by the learners who learn only L2 English (the L2 group) and those who learn both L2 English and L3 French (the L3 group).

Briefly, Table 7.1 below shows that the L2 group participants performed significantly better than the L3 group (66% versus 38%, $p=.000$) in L2 English number marking. The L3 group participants performed inaccurately 62% of the time, while their counterparts did so only 33% of the time ($p=.000$). The two groups' years of instruction in L2 English are the same. However, the reason to why the two groups performed differently in marking number structure in their L2 English is arguable.

Table 7.1 L2 English Number Marking Comparison between L2 Group and L3 Group

	Correct Number Marking	Incorrect Number Marking	Mean
Form Two L2 Group N=30	66% (199/300)	33% (101/300)	6.6 versus 3.3
Form Two L3 Group N=30	38% (115/300)	62% (185/300)	3.8 versus 6.1
Asymp.(2-tailed)	p= .000	p= .000	

Figure 7.1 below, on the other hand, presents L2 English and L3 French number marking structures by the form two L3 group participants. In this figure, results show initially that, the participants produced more often the incorrect or non-target like number structures in both languages (62% versus 69%, respectively, for English and French test versions) while the correct production of number marking in both languages was only 38% versus 31%, respectively, for English and French test versions. At first glance, it seems that the participants were more accurate in their L2 English number marking than in their L3 French.

**Figure 7.1 L2 English and L3 French Number Marking by L3 French Learners**

The Wilcoxon Signed Ranks statistical test was run to see if the results presented above are statistically significant. Results from this test showed that the percentage scores presented in figure 7.1 were not significantly different. In fact, the correct number marking mean ranks became 15.3 versus 13.1 respectively for the English and French test versions; $Z = -1.34$, but $p = .179$, while the incorrect number marking mean ranks were also 13.1 versus 15.3, respectively for English and French tests; $Z = -1.34$, but $p = .179$. The Z-scores and the p-values remained constant for both correct and incorrect scores because in both contexts the difference in the percentage scores was the same. From this data, the L3 group performed similarly and showed a similar tendency in the way they marked number structures on their L2 English and L3 French.

The similar performance just presented above is, on the one hand, contrary to the assumptions previously formed in multilingual acquisition models. Thus, whether there is any positive transfer from the L2 English on the L3 French number marking structure due to typological relation and the foreign language effect between English and French, and the learners' linguistic awareness (what the learners previously known) is not clear with the current results. On the other hand, these results reveal the large number of the incorrect over the correct number marking forms in both languages (61% versus 38%, respectively to incorrect and correct use for English number marking; and 69% versus 31%, respectively to incorrect and correct use for French number marking).

Therefore, the large number of errors which the L3 group produced in both languages is evidence that the current learners' knowledge about number marking is quite limited in both languages despite the difference in terms of the years of instruction between the L2 English and L3 French. From these results, therefore, one can be in a position to argue that the prediction made in this study concerning the number marking transfer is met. Briefly, it was

predicted that, the L2 English and the L3 French number marking structure by the L3 group (learners who learn L2 English and L3 French concurrently before a certain level of high proficiency in their L2 English) would not differ. In addition, it was predicted that, when the L3 group L2 English number marking production is compared to that of the L2 group, the L2 group would outperform.

Furthermore, in the current data two types of errors regarding number marking structure in both target languages by the L3 group were observed. The L3 group often tended to omit the appropriate article (operationalized as the use of bare NPs) and sometimes replaced an appropriate article form with inappropriate one (operationalised as substitution). The two mistakes are reported quantitatively in table 7.2 below.

Table 7.2 The Use of Bare NPs and Article Replacement by 30 Form Two L3 Group

Test version	The use of bare NPs	Substitution	Correct forms
English N=30	38% (114/300)	24% (72/300)	38% (144/300)
French N=30	40% (120/300)	29% (87/300)	31% (93/300)

It should be noted and remembered that, for both target languages I examined plural forms while singular forms were taken as default. Therefore, for L3 French I examined the use of definite article *les* and indefinite article *des* which, for both of them, occur or modify a plural noun (refer also back in the methodology for a comprehensive presentation about this). In addition, for L2 English, I examined the use of a *zero article* (Θ) which marks general meaning of an indefinite plural noun and the use of *the*, which marks the specific meaning of a plural count noun. For French, a language which rarely allows bare NPs, the L3 group often produced utterances such as the following. These utterances are presented to substantiate the quantitative results presented in table 7.2 above.

- (7.1) **cigarettes ne sont pas bonnes pour la santé*
 ΘNP-PL NEG are not good for def. health
 ‘Cigarettes are not good for health’
 (Participant: FII. L3group. NGR. 20)

- (7.2) **eau est nécessaire pour la vie*
 Θ-NP is necessary for def. life
 ‘Water is necessary for life’
 (Participant: FII. L3group. NGR. 23)

And for English, the L3 group often generalised the use of zero article even in the context where the definite article *the* was required to make the noun not only definite but also specific. This also was revealed as the use of bare NPs in L2 English (refer to the quantitative results about this in table 6.2 above) and it was produced in utterances such as the following.

- (7.3) **cars of my brothers*
 ΘNP-pl of my brother
 (Participant: FII. L3group. NGR. 25)

- (7.4) *but *dogs which we took to hunt yesterday failed*
 but ΘNP-pl which we took to hunt yesterday failed
 (Participant: FII. L3group. NGR. 30)

Moreover, the L3 group also replaced or substituted the appropriate article form with inappropriate ones in both target languages. The examples are given below.

In the English Version:

- (7.5) *there were a* motorcycles in the parking*
 there were indef. motorcycles in the parking
 (Participant: FII. L3group. NGR. 05)

- (7.7) *there were an* motorcycles in the parking*
 there were indef. motorcycles in the parking
 (Participant: FII. L3group. NGR. 12)

- (7.8) *there were the* motorcycles in the parking*
 there were def. motorcycles in the parking
 (Participant: FII. L3group. NGR. 10)

In the French Version:

- (7.9) *il y avait *les motos dans le parking*

there were **def. pl. motorcycles** in the parking
(Participant: FII. L3group. NGR. 10)

(7.10) *il y avait *une motos dans le parking*
there were **indef. sing. motorcycles** in the parking
(Participant: FII. L3group. NGR. 11)

(7.11) *il y avait la* motos dans le parking*
there were **def. fem. motorcycles** in the parking
(Participant: FII. L3group. NGR. 13)

Briefly, results just presented above show that the L3 group participants performed worse than the L2 group participants in L2 English number marking. In addition, the L3 group performed similarly in both their L2 English and L3 French number marking. In both languages they made two types of mistakes, namely the use of bare NPs and the replacement of an appropriate article with inappropriate one. While in L2 English the bare NPs could be taken as a normal use of a zero article, it was incorrectly overgeneralised in the places where a definite plural article was obligatory. Moreover, the use of the bare NP in French is rarely allowed. Therefore, it was suspected that the use of bare NPs in L3 French number marking would be a negative transfer from the L1 Swahili, L2 English or from both L1 Swahili and L2 English. In the following subsections, I discuss the three assumptions.

7.2.1 Assumption one: L1 Swahili negative transfer on both L2 English and L3 French

The fact that Swahili marks the number feature through a morphological affix which is attached to a noun and/or a verb, and that this structure allows bare NPs (a noun phrase without any determiner word of any kind) creates a suspicion that the current respondents would have negatively transferred the Swahili bare NPs on both L2 English and L3 French number marking interlanguage. The following examples illustrate how bare NPs are formed in Swahili.

(7.12) *m-toto* *wa-toto*
1SG-child 2PL-child
'Child' 'Children'

(7.13) *Ø-gari* *ma-gari*
ØSG-car 2PL-cars

‘Car’ ‘Cars’

In a clause, Swahili number affixes are attached to both noun and verb as in 6.14 and 6.15 examples below:

(7.14) *m-toto* *a-na-kula*
 1SG-child 3SG-PRES-eat
 ‘a/the child is eating, or one child is eating’

(7.15) *wa -toto* *wa-na-kula*
 2PL-child 3PL-present-eat
 ‘children are eating’

Briefly, the bare NPs which were produced by the current participants in both L2 English and L3 French are similar to the Swahili bare NP structure just presented above. However, this structure became an incorrect number marking form when used in both target languages. Therefore, I am in a position to assume and argue that perhaps these learners transferred negatively from their L1 Swahili bare NP structure to L2 English, as well as to L3 French number marking because in both interlanguages the transferred structure was incorrect. The second assumption is that the L2 English would have also transferred negatively to the L3 French. This argument is presented in the following subsection.

7.2.2 Assumption two: The L2 English negative transfer on L3 French

I have so far attributed the bare NP structures revealed in L2 English and L3 French interlanguage as a negative transfer from the L1 Swahili. However, the fact that English has a different number marking system from French creates a conviction that the current learners would also have transferred negatively the L2 English number marking to L3 French. In this regard, while L1 Swahili might have transferred the bare NP structure, the L2 English might have transferred the zero-article form. The examples below are the L3 French number marking interlanguage forms (examples 7.16 and 7.17) compared with the L2 English zero-article structures (examples 7.18 and 7.19). These examples indicate that the incorrect bare NP which

was used by the current respondents in their L3 French interlanguage look also similar to the L2 English zero article form. It should be noted that, in English, indefinite plural nouns occurs with a zero-article form. But the same structure when used in French leads to non-target forms (incorrect forms).

French interlanguage zero-article form

- (7.16) **cigarettes ne sont pas bonnes pour la santé*
NP-PL NEG are not good for def. life
 (Participant: FII. L3group. NGR. 20)

- (7.17) *Il y avait *motos dans le parking*
 there were **NP-PL** in def. parking
 (Participant: FII. L3group. NGR. 03)

English zero-article form (Θ)

- (7.18) *cigarettes are not good for health*
 Θ **NP-PL** are not good for health
 ‘cigarettes are not good for health’

- (7.19) *there were motorcycles in the parking*
 there were Θ **NP-PL** in the parking
 ‘there were motorcycles in the parking’

Briefly, presented in this subsection is the assumption that L2 English, given its difference from L3 French number marking structure, would have negatively transferred its structures to the L3 French number marking system. In the following subsection the article substitution errors are presented as the influence from L2 English and L3 French on each other.

7.2.3 Assumption three: Effects from L2 English and L3 French on one another

As it was presented in the beginning of this section, there were some instances in the data where the L3 group used the definite or indefinite article forms incorrectly in contexts where the indefinite or zero article was to be used. This tendency happened in the contexts where, for example, a zero-article form (Θ) was obligatory in L2 English and an indefinite plural article (*des*) was obligatory in L3 French. However, the current participants showed a tendency to use an indefinite singular and definite articles interchangeably in both L2 English and L3 French

interlanguage (refer above to examples 7.16-7.19). I have interpreted the above tendency as an effect from both the L2 English and the L3 French on each other. This could happen given the difficulties entailed in the article structures and their semantic functions in both target languages. Following is the summary and discussion about the results on number marking structure.

7.2.4 Summary and discussion about number marking transfer

Briefly, in this section I reported results from the data which aimed at examining the source and the form of number marking transfer in L3 French by 30 Form Two learners of L2 English only, and 30 Form Two learners of both L2 English and L3 French. Thus, this section addressed research question four. It was predicted, on the one hand, that the linguistic typology, foreign language effect, as well as linguistic awareness would not trigger the L2 English number marking transfer to L3 French as predicted in previous L3 acquisition models. On the other hand, number marking transfer to L3 French was predicted to reveal as negative transfer because, the two target languages are being acquired concurrently. Although these learners started learning L2 English a bit earlier than L3 French, no high level of proficiency has been attained in their L2 English. In this sense, the current participants were not expected to show better performance in their L3 French number marking. Instead, they were expected to perform similarly between their L2 English and L3 French number marking. Moreover, although the years of instruction in L2 English are the same between the L2 group participants and L3 group participants, the L3 group participants were not expected to outperform the L2 group participants because of the complications which were predicted to be entailed in the concurrent acquisition of two languages.

The results have revealed as it was predicted. Firstly, the L3 group participants did not outperform the L2 group participants in the L2 English number marking. Secondly, the L3

group participants did not perform better in their L3 French number marking. Instead, they performed similarly in both L2 English and L3 French number marking. Thirdly, the similar performance was much more on incorrect number marking forms. The observed incorrect forms were the incorrect use of bare NPs and article substitution errors. On the one hand, the DP structure in the L3 interlanguage seems to match the L1 Swahili bare NP structure. On the other hand, it seems to match the L2 English zero article structure. From these results, it can be concluded that positive transfer from L2 English did not occur. Instead, both L1 Swahili and L2 English seem to have transferred negatively to the L3 French number marking interlanguage.

These results diverge from the assumptions which are made in previous L3 acquisition models. To start with, in the L1 absolute model (which is supported in studies such as Jin-Futen, 2009; and Na Ranong and Leung, 2009), a privilege is given to an L1 as a major language which can trigger acquisition of an L3, with a condition that such an L1 is linguistic typologically similar to the L3. In the case of this study's results, the negative transfer which is suspected to be from the L1 Swahili cannot be sufficiently translated by this model because of the typological dissimilarity between the L1 Swahili and the L3 French. However, one can argue that L1 Swahili has negatively affected the L3 French number marking, given the typological difference between the two languages.

In addition, the L2 status model (proposed by Bardel and Falk, 2007 and Falk and Bardel, 2011; also supported in studies such as Cenoz, 2001; De Angelis and Selinker, 2001; Jaensch, 2008; Hsien-Jen-Chin, 2009; Flynn, 2009; Jaensch, 2009; Kullundary and Gabrielle, 2012) gives a privilege to an L2 as a major source of facilitative transfer to an L3, if such an L2 is a foreign language recently learned or a foreign language which is mostly used in the learners context (see also, Gutiérrez-Magando and Martínez-Adrián, 2018, on the recency factor for a Basque

transfer on L3 English). Results from this study, however, are not showing any possibility of facilitation from the L2 English (the only foreign language which is learned before the L3 French). Instead, the learners' performances were below chance, not only in L3 French, but also in their L2 English. Therefore, the reason as to why the current learners performed poorly in their L3 number marking transfer could still not be clearly explained within the L2 status model.

The CEM (which is supported by studies such as Foote, 2009; Berkes and Flynn, 2012; and Rothman and Halloran, 2013) on the other hand, maintains that neither L1 nor L2 is honoured as a source of transfer to an L3. Instead, transfer to an L3 can be from all or any previous known language. However, this transfer should be facilitative. Otherwise, the non-facilitative transfer should be neutral. Therefore, the CEM also insufficiently explains the negative transfer revealed in this study. It is, on the one hand, true that transfer in this study could have come from both L1 and L2. On the other hand, this transfer has revealed as negative transfer.

The negative transfer which is revealed in this study can at least be explained with the TPM model (Rothman, 2010; 2011; 2013), which predicts the occurrence of both facilitative and non-facilitative effects. In the case of this study's results, one can comment, on the one hand, that the L2 English has transferred negatively to the L3 French because of the divergence in number marking structures between it and French. On the other hand, perhaps because of the difference in number marking structures between the L1 Swahili and the L2 English, as well as the L3 French, the L1 Swahili has transferred negatively on both the L2 English and the L3 French number marking structures. Thus, it can be the case that the differences in article systems (specifically, number marking) among the languages in question has also led to confusion. However, the different performances between the L2 group participants and the L3 group participants in L2 English number marking, and the similar performances in the L2

English and the L3 French number marking by the L3 group participants, can still be questioned. In other words, if the typological effects from the L1 Swahili were a factor, the L2 group participants and the L3 group participants should have performed similarly in the L2 English number marking.

The evidence concerning the way learners transfer previous language structures to a subsequent language are, in most cases, inconclusive. For example, Jaensch (2012) showed that learners with an articleless and genderless L1 outperformed their counterparts who had an L1 which is typologically closer to the L3. Furthermore, all other factors in support of the L3 acquisition models did not work. Likewise, the comparison between the L2 and L3 groups in Rothman and Cabrelli (2010)'s study did not show any difference and the authors interpreted it as an indication of the L2 interlanguage development and L3 ultimate attainment.

In addition, Gibson, Hufeisen and Libben (2001) concluded that having an L2 or L1 similar to the L3, or having learned another foreign language prior to the L3, do not play a role for transfer to occur in L3 acquisition. Likewise, Jin (2009), in addition, argued that L1 influence still counts even if the learners have an L2 which is typologically similar to the L3. For Na Ranong and Leung (2009), L1 influence is not only revealed on an L3 but also on an L2; Hsien-Jen-Chin (2009) also did not neglect the influence from the L1; and Kullundary and Gabrielle (2012) argued that L2 structure can both help and hinder the L3 acquisition. Hence, both negative and positive transfer can be part of the L3 acquisition process.

Therefore, it is hard to draw a conclusion that cross-linguistic influence or transfer in multilingual acquisition can be only determined by linguistic factors such as language typology, linguistic awareness, language proximity, recently acquired language, foreign language effect or L2 proficiency. Likewise, with this study's design and methodology, the current results might be suggesting a different factor apart from the typological factor (among

other factors) between L2 English and L3 French, or between the L1 Swahili and the L3 French. It should be remembered that results from this study were obtained from concurrent multilingual acquisition as opposed to consecutive multilingual acquisition.

To the best of my knowledge, the above four models were introduced to account for the initial state of an L3 acquisition from a consecutive multilingual acquisition perspective. While one can expect a high chance of an L2 to transfer positively to the initial state of a typological related L3 in a consecutive multilingual acquisition, the high chance of negative transfer can be expected in the concurrent acquisition of both the L2 and the L3, irrespective of the typological factor between the two languages. I have illustrated the difference between the two types of acquisition below in Figure 7.2 and Figure 7.3.

On the one hand, Figure 7.2 illustrates that only an L3 is involved in the process of acquisition after an acquisition of an L2. Cenoz (2000) illustrated this type of multilingual acquisition as $L1 \rightarrow L2 \rightarrow L3$ which means an L3 is acquired after an L2 (refer also back to table 2.2 in section 2.6). This means, the multilingual learner has already in his mind the structures of his L1 and L2; and now s/he is struggling to shape and develop only an L3. I have termed this process as mono-interlanguage development. In addition, there is a greater chance of facilitation from an L2 on mono-interlanguage development, because a multilingual learner, in a mono interlanguage development process, theoretically has a certain high level of L2 competency or linguistic awareness (Jessner, 2006).

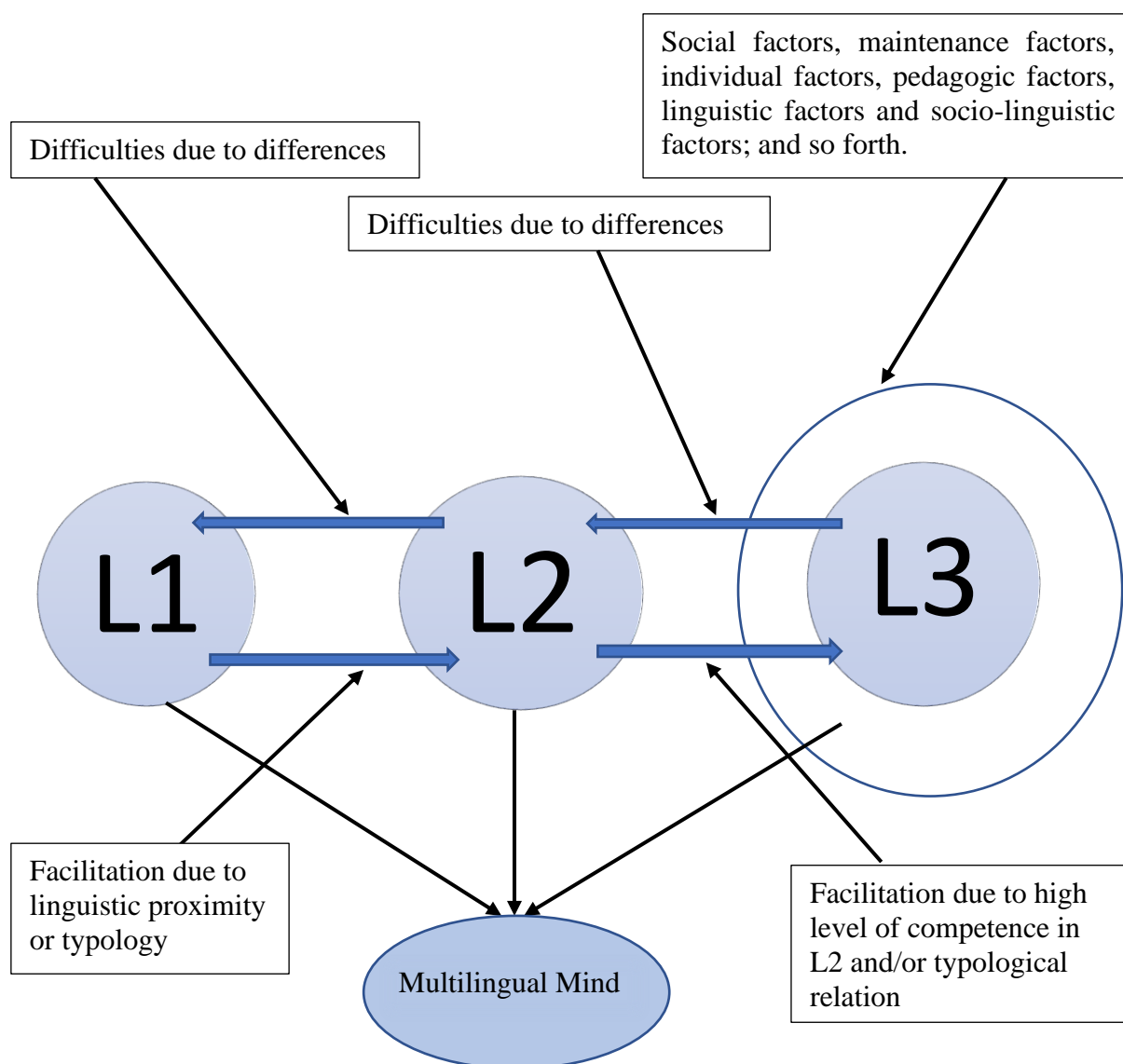


Figure 7.2 Consecutive Multilingual Acquisition (Mono-interlanguage development)

On the other hand, if such a learner is also at initial state of an L2, it means s/he is struggling to develop the two languages side by side as illustrated below in Figure 7.3. Figure 7.3 illustrates that the two languages (an L2 and an L3) are theoretically being developed simultaneously. This is also illustrated by Cenoz, (2000) as $L1 \rightarrow L2/L3$ (refer back to table 2.2 in subsection 2.6). In other words, in this type of multilingual acquisition, the multilingual learner is struggling to develop two interlanguage systems or multi-interlanguage at once. Therefore, facilitation from an L2 is limited to low level of competence (especially at initial

state). In other words, positive transfer from an L2 to an L3 is to some extent not expected in this circumstance because the L2 and the L3 are being developed side by side, despite the fact that the L2 might have been started few steps back before the L3. In addition, non-facilitative effects from a mother tongue (if any) are expected to affect not only the L2 but all systems in the pool of concurrent acquisition.

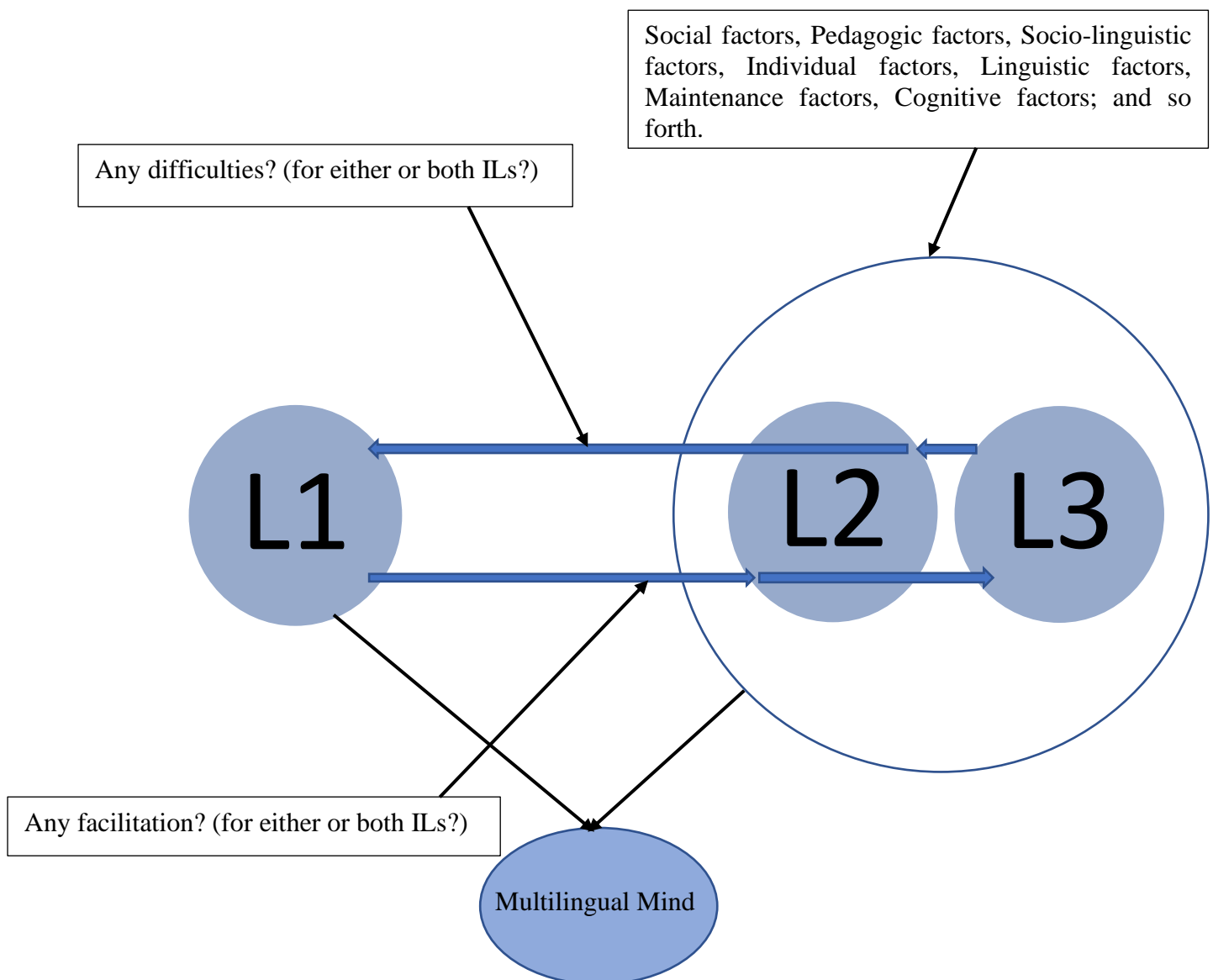


Figure 7.3 Concurrent Multilingual Acquisition (Multi-interlanguage development)

Briefly, external factors (such as social factors, pedagogic factors, socio-linguistic factors, individual factors, linguistic factors, maintenance factors and cognitive factors) surrounding

the two processes are the same. However, these factors affect the development of one language in consecutive multilingual acquisition while they shape the multi-interlanguage in case of the concurrent multilingual acquisition. Therefore, the current results may be suggesting a requirement for an additional model which can account for the negative transfer (like the one revealed in this study) which is not sufficiently explained by the previous models.

I would now propose the Multi-Interlanguage Model (MIM). This model would entail that when two or more than two languages are being acquired concurrently before a native-like competence in an L2 has been achieved, the negative transfer from the L1 or the L2 to the L3 seemingly becomes common, regardless of the typological relation factor between the languages. This can happen because the language typological differences, difficulties entailed in each individual language structures and the effects from other external factors (social, individual, pedagogical, psychological) all work together in shaping the multi-interlanguage and consequently complicate the acquisition process. Unless the language maintenance (Herdina, 2002) efforts as well as the non-misleading inputs (Slabakova, 2017) are considered, the negative transfer effects can remain even in a later stage of L3 language development. In the following section, the discussion is turned to the findings on the L3 French interlanguage characteristics.

7.3 L3 French developmental characteristics

This section presents the data and results to address research question five. Presented are the L3 French interlanguage characteristics of the learners who concurrently learn L3 French and L2 English. It should be noted, as it was also defined in the introduction, that the notion of interlanguage in the current analysis is taken as it is coined by Selinker (1972). In this regard, participants' errors are taken as an interlanguage system on its own (see also Bayona, 2009) and the current analysis is not an error analysis. Therefore, the analysis of the interlanguage

characteristics focuses on the incorrect use of articles in the context where definite and/or indefinite articles are obligatory.

This section is organised as follows. Subsection 7.3.1 is about the incorrect use of the definite article form in indefinite article contexts, followed by subsection 7.3.2 which is about the incorrect use of the indefinite article form in definite article contexts. Then, the use of the zero article in definite and indefinite article contexts follows in subsection 7.3.3. Subsection 7.3.4 ends the section by presenting the use of other forms and omission.

7.3.1 Incorrect use of definite article

In the current data, the respondents produced an interlanguage which is characterised by the incorrect use of the definite article. This interlanguage characteristic was analysed against the correct use of indefinite article form. It should be noted that there were 18 obligatory contexts for indefinite article use. Therefore, the incorrect use of the definite article was analysed from 540 written raw tokens produced by each L3 French group (form two, three and five). Results regarding the above analysis are presented below in Table 7.3.

Table 7.3 Incorrect Use of the Definite Article by L3 Group

	Indefinite /540	Definite /540
Form Two N=30	271 /50.1%	213 /39.4%
Form Three N=30	263 /48.7%	225 /41.6%
Form Five N=30	291 /53%	243 /45%
Kruskal-Wallis Test		($\chi^2(2)=3.17$, $p=.205$, Mean ranks=40.1, 44.4,51.9)

Results in Table 7.3 above shows that all levels of L3 French classes used, to some extent, the definite article incorrectly against the correct use of the indefinite article. These results, in addition, show at first glance that the higher level were, to a certain extent, more incorrect than the lower levels in the use of the definite article in place of the indefinite one (39.4% versus 41.6% versus 45%). But the statistical test has shown that there were no significant differences in the incorrect performance of the definite article between the higher and the lower levels ($\chi^2(2)=3.17$, $p=.205$, Mean ranks=40.1, 44.4, 51.9, respectively for form two, three and five). Yet, the similar inaccuracy, between the lower and the higher classes, in the use of indefinite article indicates that the difficulties in matching correctly an article form to its meaning or use can still persist even in the later stages of acquisition. In addition, the definite article seems to be the last article form to be acquired and/or the form which can be prone to fossilization because it continues to be used incorrectly even in the higher stages. In the following subsection the presentation is turned to the incorrect use of the indefinite article.

7.3.2 Incorrect use of the indefinite article

The incorrect use of the indefinite article is also observed as one of the developmental characteristics of the current respondents' interlanguage. The incorrect use of the indefinite article was analysed out of 38 obligatory contexts for a definite article. This makes a total of 1140 raw count tokens by each class group. The use of zero article and other forms in the same context will be presented later.

Table 7.4 Raw Counts and Percentages for Incorrect Use of Indefinite Article

	Definite /1140	Indefinite /1140
Form Two N=30	384 /33.6%	535 /46.9%
Form Three N=30	574 /50.3%	393 /34.4%
Form Five N=30	744 /65.2%	356 /31.3%
Kruskal-Wallis Test		($\chi^2(2)=23.8$, $p=.000$, Mean ranks=64.03, 39.6, 32.8

Results regarding the incorrect use of the indefinite article are presented in Table 7.4 above. Table 7.4 reveals that, the incorrect use of the indefinite article was mostly found in the interlanguage of the lower classes ($\chi^2(2)=23.8$, $p=.000$, Mean ranks=64.03, 39.6, 32.8; respectively for form two three and five). In fact, the form two incorrectly used the indefinite article 46.9% of the time over that of the definite article which was 33.6%. Unlike the use of the incorrect definite form which increased with an increase in the year of instruction, the use of the indefinite article in places of the definite article seems to decrease as the year of instruction increases (34.4% by form three and 31.3% by form five). In fact, it is revealed in the current data that whenever the use of articles activates in their L3 system, the article which came as a default option, was an indefinite article form.

The utterances below are some examples where form two learners used indefinite article forms more often where the definite article forms were obligatory. The second sentence for each interlanguage utterance contains a correct form of an article which the learner was supposed to produce and its translation in English. The incorrect and the correct forms of articles in the first and the second sentences are respectively bolded and italicized. The participant code is provided below each interlanguage utterance.

(7.20) *Il y avait des motos dans ***un parking**.*
(Participant: FII. L3group.NGR. 02)

Correct: *Il y avait des motos dans **le parking***
'There were motorcycles in **the parking**'

(7.21) *J'ai vu un chien dehors; ***un chien** a fui.*
(Participant: FII. L3group.NGR. 14)

Correct: *J'ai vu un chien dehors; **le chien** a fui*
'I saw a dog outside; **the dog** ran away'

(7.22) *Passez-moi ***un tasse** qui est sur la table.*
(Participant: FII. L3group.NGR. 21)

Correct: *Passez-moi **la tasse** qui est sur la table*
 ‘Give me **the cup** which is on the table’

(7.23) **Une voiture de mon frère est garée en face de la maison*
 (Participant: FII. L3group.NGR. 04)

Correct: ***la voiture** de mon frère est garée en face de la maison*
 ‘**the car** of my brother parked in front of the house’

(7.24) *Donatha est *un enseignante d’anglais*
 (Participant: FII. L3group.NGR. 15)

Correct: *Donatha est **Θ enseignante** d’anglais*
 ‘Donatha is **an English teacher**’

(7.25) *Alors, une voiture de mon frère est garée en face de *un maison.*
 (Participant: FII. L3group.NGR. 11)

Correct: *Alors, la voiture de mon frère est garée en face de **la maison***
 ‘Therefore, the car of my brother parked in front of **the house**’

(7.26) *Beaucoup d’ingrédients utilisés dans *des cuisine africaine sont inconnus.*
 (Participant: FII. L3group.NGR. 18)

Correct: *Beaucoup d’ingrédients utilisés dans **la cuisine africaine** sont inconnus...*
 ‘Many ingredients which are used in **african cuisine** are unknown...’

(7.27) *Passez-moi *des tasse qui est sur la table*
 (Participant: FII. L3group.NGR. 27)

Correct: *Passez-moi **la tasse** qui est sur la table*
 ‘Give me **the cup** which is on the table’

(7.28) *J’ai pris *un lait et un pain qui étaient dans le frigo.*
 (Participant: FII. L3group.NGR. 28)

Correct: *J’ai pris **le lait** et le pain qui étaient dans le frigo*
 ‘I took **the milk** and the bread which were in the fridge’

(7.29) *J’ai pris le lait et le pain qui étaient dans *un frigo*
 (Participant: FII. L3group.NGR. 30)

Correct: *J’ai pris le lait et le pain qui étaient dans **le frigo***
 ‘I took the milk and the bread which were in **the fridge**’

(7.30) *J’ai vu un chien dehors; *des chien a fui.*
 (Participant: FII. L3group.NGR. 01)

Correct: *J’ai vu un chien dehors; **le chien** a fui*

‘I saw the dog outside; **the dog** ran away’

(7.31) **Un langue Swahili est parlée en Tanzanie.*
(Participant: FII. L3group.NGR. 02)

Correct: *La langue Swahili est parlée en Tanzanie*
‘Swahili language is spoken in Tanzania’

(7.32) *Mais, Anglais est parlée dans *une monde entier.*
(Participant: FII. L3group.NGR. 02)

Correct: *Mais, l’anglais est parlé dans le monde entier*
‘But English is spoken all over the world’

7.3.3 Incorrect use of the zero article (Θ)

The use of incorrect zero article was another characteristic revealed in the current data. This was analysed against the context where the respondent was obligatorily required to use the definite or indefinite article form. The developmental pattern in which this characteristic took form is presented below in Table 7.5.

Table 7.5 Raw Counts and Percentages for the Incorrect Use of Zero Article (Θ)

	In Def Article Context /1140	In Indef Article Context /540
Form Two N=30	83 /7.2%	13 /2.4%
Form Three N=30	94 /8.2%	13 /2.2%
Form Five N=30	30 /2.8%	3 / 0.5%
Kruskal-Wallis Test	($\chi^2(2)=30.2$, p=.000, Mean ranks=52.9, 58.7, 24.8	($\chi^2(2)=4.8$, p=.090, Mean ranks=48.9, 48.3, 39.2

Table 7.5 shows that the incorrect use of the zero article is a tendency or an interlanguage characteristics at all levels, although it decreases with an increase in the level of instruction (mean ranks= 52.9, 58.7, 24.8 respectively for form two, three and five; p=.000; in definite article contexts) and (mean ranks=48.9, 48.3, 39.2 respectively for form two, three and five; p= .090; in indefinite article contexts). Secondly, the results in the above table also show that

the zero article was mostly used where the definite article was obligatory, as opposed to where the indefinite article was to be used. These results might imply that the current learners face difficulties in mapping a definite article form to its meaning or use more often than mapping the indefinite article form. The following are examples of interlanguage utterances which were produced by the current participants not only by lower level (form two groups) but also by high levels (form three and five).

(7.32) ***Ø** *Fille et *Ø garçon cueillir *Ø fruits.*

‘girl and boy pick fruits’

(Participant: FIII. L3group. DSM. 02)

Correct: *Une fille et un garçon cueillir des fruits*

‘A girl and a boy pick fruits’

(7.33) *la fille mettre *Ø fruits dans *Ø panier*

‘the girl put fruits in basket’

(Participant: FIII. L3group. DSM. 04)

Correct: *la fille met les fruits dans la panier*

‘the girl put the fruits in the basket’

(7.34) ***Ø** *enfants jouent football.*

‘children play football’

(Participant: FV. L3group. TBR. 06)

Correct: *les enfants jouent le football*

‘the children are playing football’

(7.35) ***Ø** *Garçons jouent football.*

‘Boys are playing football’

(Participant: FV. L3group. DSM. 06)

Correct: *les garçons jouent le football*

‘the boys are playing football’

(7.36) ***Ø** *garçon monte *Ø arbre*

‘boy climb tree’

(Participant: FV. L3group. DSM. 07)

Correct: *Le garçon est monté sur l’arbre*

‘the boy climbed the tree’

(7.37) ***Ø** *fille et *Ø garçon. Une garçon monte *Ø arbre cueillir *Ø fruits.*

(Participant: FV. L3group. KRG. 05)

Correct: *une fille et un garçon. Le garçon est monté l'arbre pour cueillir des fruits*
 'a girl and a boy. The boy climbed the tree to pick some fruits'

Before turning to a conclusion and overall discussion about the interlanguage characteristics, the last interlanguage characteristics which was observed in the current data is presented below.

7.3.4 The use of other forms and omission

The current L3 French participants also used other forms (forms which are not articles) and they sometimes avoided providing any form of article (omission). Omission in this study was differentiated from the use of the zero article in that the zero article was given a symbol \emptyset . Any places where the learners did not use any form of article or the symbol \emptyset , or a context where a respondent avoided providing any form of article, was analysed as omission. Moreover, the other forms which were mostly used by these learners were the prepositions, *de* (of), *du* (of the), and *des* (of the) which take the same form as partitive article (which were not the focus of the current study) or the plural indefinite article, *des* (some), the number quantifiers such as *un, deux, trois* (one, two, three) and the code mixing of some English utterances.

The analysis regarding the use of other forms and omission was done against the obligatory contexts where the respondents were required to supply the definite or indefinite article forms. Results are presented below in Table 7.6. In addition, some interlanguage utterances are also presented to support the quantitative results.

Table 7.6 Raw Counts and Percentages for the Use of Other Forms and Omission

	In Def Contexts /1140		In Indef Contexts /540	
	Other Forms	Omission	Other Forms	Omission
Form Two N=30	134/11.7%	4 / 0.3%	47 /7.5%	0
Form Three N=30	52/4.5%	24 / 2.1%	17 /3.1%	23 /4.2%
Form Five N=30	0	8 / 0.7%	0	3 /0.5%
Kruskal Wallis Test	$(\chi^2(2)=57$ p=.000, Mean ranks=69.7, 45.3, 21.5	$(\chi^2(2)=5.05,$ p=.080, Mean ranks=41.4, 51.6, 43.4	$(\chi^2(2)=27.8,$ p=.000, Mean ranks=60,44,31	$(\chi^2(2)=14.2,$ p=.001, Mean ranks=40,53,42

These results reveal two main things. Firstly, omission and the use of other forms are the interlanguage characteristics of the lower levels. In fact, form two used much more the other forms (11.7%, mean rank 69.7; p=.000; in definite article context and 7.5%, mean rank 60, p=.000; in indefinite article context) while form three tended to omit more often than form five by 2.1%, mean rank 51.6, p=.080; in definite article context and by 4.2%, mean rank=53, p=.001; in indefinite article contexts. These results might be suggesting that French articles can be fully acquired in a certain higher-level stage of L3 French acquisition than in lower levels. In addition, the use of the partitive article *du* ‘some’ with the mass noun *lait* ‘milk’ in the definite context might be suggesting that the learners learn that partitive articles have to be used with the mass nouns.

Secondly, as in in the previous analysis, the respondents used other forms or more often omitted in the contexts where the definite article was obligatory, compared to the indefinite article contexts. The sample examples of the use of other forms by form two and form three participants are presented below. The English utterances given in the inverted commas are the direct translation of the given L3 interlanguage. In examples 7.47, 7.51 and 7.53, the respondents used the English words.

- (7.38) *Voici **deux enfants**, garçon et fille*
 ‘these are **two children**, girl and boy’
 (Participant: FIII. L3group. DSM. 16)
- (7.39) **J’ai vu **de chien** dehors*
 ‘I saw **of dog** outside’
 (Participant: FIII. L3group. DSM. 11)
- (7.40) *J’ai pris **du lait** qui était dans le frigo*
 ‘I took **some milk** which was in the fridge’
 (Participant: FIII. L3group. DSM. 04)
- (7.41) *L’Anglais est parlée dans **du monde** entier*
 ‘English is spoken in **of the world** whole’
 (Participant: FII. L3group. NGR. 13)
- (7.42) *On utilise aussi **du feuilles** dans la préparation...*
 ‘We use also **of the firewood** in the preparation...’
 (Participant: FIII. L3group. DSM. 15)
- (7.43) *J’ai pris le lait qui était dans **de frigo***
 ‘I took the milk which was in **of fridge**’
 (Participant: FII. L3group. NGR. 06)
- (7.44) *J’ai pris **de lait** qui était dans le frigo*
 ‘I took **of milk** which was in the fridge’
 (Participant: FIII. L3group. DSM. 07)
- (7.45) *Le garçon monte à **arbre***
 ‘The boy climbs **to tree**’
 (Participant: FIII. L3group. DSM. 02)
- (7.46) ***Du fleuve** Congo est en Afrique*
 ‘**of the river** Congo is in Africa’
 (Participant: FIII. L3group. DSM. 02)
- (7.47) *La fille take **some fruits***
 ‘The girl takes **some fruits**’
 (Participant: FII. L3group. DSM. 02)
- (7.48) *Les enfants jouent le football, **a garçon** tombe*
 ‘The children are playing football, **a boy** falls’
 (Participant: FII. L3group. DSM. 04)
- (7.49) *Passez-moi **de tasse** qui est sur la table*
 ‘Give me **of cup** which is on the table’
 (Participant: FIII. L3group. DSM. 25)
- (7.50) *Passez-moi **de la tasse** qui est sur la table*
 ‘Give me **of the cup** which is on the table’

(Participant: FIII. L3group. DSM. 19)

(7.51) *Un garçon ‘sitting on a’ chaise*

‘A boy **sitting on a** chair’

(Participant: FII. L3group. NGR. 10)

(7.52) *Quatre garçons jouent le football*

‘**Four** boys are playing football’

(Participant: FIII. L3group. DSM. 10)

(7.53) *Il tombe et ‘ sit down a’ chaise*

‘He falls and **sit down a** chair’

(Participant: FIII. L3group. DSM. 13)

7.3.5 Summary and discussion about the L3 French interlanguage characteristics

Presented in section 7.3 are the L3 French interlanguage characteristics of the L1 Swahili speakers who learn French concurrently with English. The interlanguage characteristics were analysed to address research question five. Briefly, the L3 French interlanguage system has revealed the following developmental characteristics: the incorrect use of the definite article, the incorrect use of the indefinite article, the overuse of the zero article and the use of other forms as well as a tendency for omission. Firstly, the definite article was used in places where the indefinite article was obligatory, which was shown to be an interlanguage characteristic of both the lower and higher-level classes. Thus, the use of the incorrect definite article more often by the higher level than the lower-level classes, implies that the difficulties in mapping the article forms to their meanings still persist even in the higher levels of acquisition. Secondly, the indefinite article has revealed to be the default form, especially by lower level (form two) respondents. It has revealed that form two mostly overused the indefinite article form in the obligatory context for a definite article. Thirdly, the use of the zero article has been revealed to be a common characteristics of L3 French interlanguage by the current learners who acquire this language concurrently with L2 English. I attribute the zero-article overuse to the negative transfer from their L1 Swahili and/or L2 English. Fourthly, there is a systematic use of other

forms and a tendency to avoid any form of article (operationalised as omission). These two characteristics have been revealed as tendencies in lower-level classes. In addition, their occurrence has been shown to be systematic because they both happened more often in the places where the definite article was obligatory, as opposed to the indefinite article contexts. This systematic use of other forms and omission in the definite article contexts was taken as support that the definite article is more difficult to acquire than the indefinite article. In addition, the omission characteristic is attributed to the notion of communicative anxiety. According to Gass and Selinker (2008), avoidance is a characteristic of a language learner who has a greater communicative anxiety. So, with these findings we can assume that form three learners are more anxious than form two, while form five have greater confidence in communicating in this foreign language. Communicative anxiety has been used here just to explain the current results. However, it is beyond the analysis of the current research.

Fifthly, the findings have confirmed the prediction made regarding research question five. It was predicted that the L3 interlanguage would reveal a systematic developmental path across the cross-section groups where the improvement in L3 article production will increase as the year of instruction increases. Generally, results have indicated that the overgeneralisation of the indefinite article forms, the use of zero article, the use of other forms and omission were more evident in the lower level (form two and three) interlanguage than in the higher level (form five) interlanguage. These results seem to suggest that the L3 French articles can be fully acquired in a certain higher-level stages of acquisition than in lower levels.

Lastly, these results show that L3 acquisition of articles does not only involve definite-specific parameter resetting (Ionin, 2003, Ionin, Ko and Wexler, 2004) but it also involves other patterns which are caused by different factors such as negative transfer from previous known

languages, difficulties entailed in the structures of the target language itself (Jaensch, 2008) and the complexity entailed in the process of acquisition.

7.4 Concluding remarks for chapter seven

Chapter seven has presented results on number marking transfer and the L3 interlanguage characteristics of the learners who concurrently learn an L2 and an L3. Results presented in this chapter suggest that multilingual interlanguage characteristics are not only determined by linguistic factors such as language typology and perceived proximity and recency, but also by the type of acquisition.

In other words, the complications in acquiring the structures of the subsequent languages in questions can also be caused by the process of acquisition, that is, the type of multilingual acquisition, whether it be a consecutive or a concurrent process. In brief, the presupposed multilingual acquisition complications increase from the consecutive process to concurrent process because in a consecutive process, there is only one interlanguage system while in a concurrent process a multilingual learner is struggling to develop multi- interlanguage systems. Therefore, in the case of transfer, it is presented in this chapter that such a learner is expected to transfer more negatively to the subsequent language even though the previously learned language is typologically or proximally related to the subsequent one.

CHAPTER 8

CONCLUSIONS

8.1 Introduction

This chapter presents a summary of the study, implications and recommendations, and the overall concluding remarks. The chapter is organised as follows: first a summary of the study is presented in section 8.2. Then, in section 8.3, the theoretical implications of the current findings are presented. Section 8.4 considers the methodological implications, followed by section 8.5 which presents the limitations of the current study and provides recommendations for future research. Finally, the chapter ends with section 8.6 which gives a general statement which concludes the study.

8.2 Summary

In this section, a summary, but not a recapitulation, of each chapter is given. It summarises the goals, aims, methods and results of the study. As introduced in chapter one, this study is contextualized from a multilingual acquisition perspective, especially in the argument whether transfer to an L3 would come from an L1, an L2 or both. Contrary to previous multilingual acquisition research, this study sought to elucidate the effect of concurrent multilingual acquisition on the interlanguage structures of a multilingual learner.

Drawing from the idea that multilingual acquisition is different from other types of language acquisition because it involves multiple languages, I predicted that there would be some insights which differentiate consecutive multilingual acquisition (acquisition of an L3 or L4 after attainment of native-like competence in the L2) and concurrent multilingual acquisition (a process of acquiring two or three non-native languages side-by-side, before native-like competence is achieved in any of the languages).

Thus, the effect of the concurrent multilingual acquisition was examined in the acquisition of DPs headed by articles in L2 English and L3 French as foreign languages by learners who speak L1 Swahili (an article-less language). In this regard, three variables, namely the (in)definiteness fluctuation tendency, number marking transfer and L3 interlanguage developmental characteristics, were studied.

According to the FH (Ionin, 2003; Ionin, Ko and Wexler, 2004), the learners whose L1 lacks an article system fluctuate in the way they mark the L2 definite and indefinite article forms to their meanings (definiteness and specificity settings). However, this study did not intend to evaluate the validity of the FH, but rather shed light upon concurrent acquisition as another variable which can regulate the article fluctuation tendencies, especially in multilingual acquisition perspectives.

Therefore, if the concurrent acquisition of the two languages revealed any negative effect, it was predicted that the learners of both L2 English and L3 French would not produce the L2 English articles more accurately than their counterparts who learn only L2 English. In addition, their (in)definite fluctuation tendency in L3 French article production would not differ from that of their L2 English article production.

In addition, the L3 acquisition models would predict regarding number marking transfer, that learners who learn both French and English will do better in L3 number marking since the L2 English could enhance their article production in the L3 because both English and French have articles with number marking systems. However, I predicted regarding the same that, the L3 group would not do better in L3 French number marking since the learners learn the two languages side by side before attaining a better proficiency in their L2 English. The L3 French interlanguage development was also predicted to reveal systematic characteristics with an improvement as the years of instruction increased. In addressing the issues of concurrent

acquisition, the variables summarized here were specifically interrogated in five research questions (repeated here from section 1.5):

- i To what extent is production of L2 English DPs headed by articles affected by the concurrent acquisition of two foreign languages, with respect to the (in)definiteness fluctuation tendency
- ii To what extent do production of L2 English and L3 French DPs headed by articles differ, with respect to the definiteness fluctuation tendency, when these languages are acquired concurrently?
- iii To what extent does length of exposure affect the L3 French article production in terms of the definiteness fluctuation tendency?
- iv What would be the source and form of the number marking transfer on the L3 French by the L1 Swahili speakers also learning the L2 English?
- v What are the characteristics of L1 Swahili speakers' L3 French DP interlanguage development?

To get answers to the above research questions and address the research problem, which was presented in section 1.3, I recruited 120 L1 Swahili speakers in Tanzania. The choice of Swahili speakers in Tanzania was made to address the gap left by previous multilingual acquisition studies which did not focus on other multilingual societies in the world. In addition, I used the mirror image method and design (as presented in section 4.2) which allowed me to compare interlanguage characteristics of both the L2 English and the L3 French article systems.

Therefore, I examined one group of participants who were learning only English as foreign and second language and one group who were learning both L2 English and L3 French as foreign languages concurrently. The learners who were learning only L2 English were used to control for the effect of concurrent multilingual acquisition and number transfer issues. Both groups were examined using an experimental research tool which was composed in English and French. In this regard, the L2 English group did the English version while the L3 French group did both versions.

I found from the comparison of the groups that the learners who were learning both L2 English and L3 French concurrently lag behind in the correct use of the L2 English articles. In fact, the L3 group fluctuation tendency in L2 English was high. Moreover, their L2 English interlanguage characteristics did not differ from those of their L3 French. However, in the cross-section analysis, I found that the definite fluctuation tendency in L3 French decreases with an increase in the years of exposure. These findings were interpreted therefore as an effect of the concurrent acquisition of more than two non-native languages, which complicates the acquisition process by slowing it down.

Furthermore, I found in relation to transfer issues, that both L1 Swahili and L2 English transferred onto L3 French interlanguage. These findings are, however, different from the proposals made in the L3 acquisition models. While the CEM proposes only the positive transfer from the proximal language, the present findings suggest the negative transfer as part of the multilingual acquisition process. In addition, negative transfer is more likely to happen when two or more than two languages are being acquired concurrently. In this regard, the current study suggests that transfer issues are not only caused by linguistic-related factors but also by the whole process of acquisition.

Consequently, neither the L2 status model nor the TPM factors were supported. In this study, the bare NP structure in L3 French interlanguage seems to be an effect from the plural bare NP in L2 English and from the default bare NP in L1 Swahili, an article-less language. Regarding the L3 French interlanguage characteristics, results have indicated that overgeneralisation of the indefinite article forms, the use of bare NPs, the use of other forms, and avoidance were mostly the characteristics of the lower levels (form two and three) than of the form five learners. Briefly, although the use of incorrect definite articles also seemed to be one of the interlanguage characteristics of the respondents with a high level of acquisition, the improvement in accurate

use of L3 articles seems to increase with an increase in the years of instruction. In addition, the indefinite article seems to be the first article form to be acquired.

The findings from this study have answered the specific research questions which are presented in section 1.5. Moreover, they have confirmed the predictions made previously in section 1.7 about this study. Thus, these results have significant theoretical and methodological implications. In the following section, the theoretical implications are presented before the next section which will present the methodological implications.

8.3 Theoretical implications

To the best of my knowledge, there is, so far, no specific theory for explaining the insights gained in the multilingual acquisition field, although multilingual acquisition is already identified as a unique field to be studied independently. Inquiries about multilingual acquisition are being done from multiple theoretical frameworks and most of them draw from SLA theories.

However, the unique point with multilingual acquisition theorisation is its complex nature as it involves more than two linguistic systems. In this regard, a need for empirical findings which can support the theory of complexity of multilingual acquisition process exists. While the influence or the effects of one linguistic system on another are testable and clear, the complex nature entailed in the multilingual acquisition process itself is sometimes hard to portray. There is no empirical support for those theories and models, such as focus on multilingualism (Cenoz, 2013), DMM, and holistic theorisation which in common explain multilingual acquisition as a complex process.

Thus, the current findings provide empirical support for the theories just mentioned (but also explained previously in the literature and theoretical framework chapters). The current findings

not only reveal what is going on in the interlanguage of a multilingual learner, but they also capture the process-product interaction. Moreover, the current findings shed light empirically on the notion held in the DMM (Herdina & Jessner 2000, 2002) and the SLA dynamic theory approach (Verspoor, de Bot and Lowie, 2011; de Bot, Lowie, Thorne and Verspoor, 2013), that multilingual acquisition is non-linear and interdependent. By non-linearity, the current findings have shown that the incorrect use of definite article forms which was expected to decline with an increase in the year of instruction, instead increased with an increase in the year of instruction. Interdependency and complexity involve the interaction of all variables in shaping the behaviour of the multilingual system. By interdependency (which hypothesizes that all languages in question to influence each other), the cross-linguistic influence analysis showed that all languages in question were at play in causing negative effects on one another.

In addition, by revealing that negative transfer is also part of the multilingual interlanguage characteristics; these findings have implications for multilingual acquisition models such as Slabakova's (2017) Scalpel Model which accounts for positive and negative transfer. Consequently, the current findings have suggested a novel model to account for the negative transfer specifically in concurrent multilingual acquisition. Finally, these findings provide a significant contribution to linguistic theory in general by informing us about the differences between acquisition complexity entailed in the process of acquiring only an L2 versus multiple languages.

In teaching and learning theorisation, this study has implications for educational systems which involve teaching and learning of more than one language and/or use a non-native language as a medium of instruction with the aim of fostering multilingualism and multiliteracy (Cenoz and Genesee, 1998 cited in Jessner, 2008; Cenoz, 2009; Cenoz and Jessner, 2009). The current findings support a theory that developing multiple language competencies is complex. In fact,

the current data has indicated that learners who learn two foreign languages concurrently lag behind in the use of not only L2 English but also L3 French DPs headed by articles. Therefore, the current results imply that multilingual acquisition is a reversible, divisive and non-linear process (Herdina and Jessner, 2000; 2002). This means that adding another foreign language to a current language being learned creates cognitive challenges which, if learners do not invest more time and effort into learning, can lead them to confusion or, as Gibson, Hufeisen & Libben (2001:153) call it, “cumulative confusion effect” which involves the slowness in the acquisition process of one or all language systems in question.

In Tanzania for example, it has been a point of argument that English is still a problem even at university level (Brock-Utine, 2004). In addition, this poor competence and performance in English as second and foreign language have always been attributed to sociolinguistic and pedagogical factors. However, from a multilingual acquisition point of view, Tanzanian learners start (except for private schools) learning English from nursery or standard one. Later, they get a chance to start French at form one. This does not imply (given the socio-cultural, economic and political factors) that by the time these learners start learning French they have a better level of proficiency in English. Thus, the addition of French along the way might disrupt the acquisition of English and create a learning burden. Teachers should understand that the concurrent acquisition of two or three foreign languages can lead to temporal attrition or delay in the acquisition of one language or both if the factors, such as enough time for maintenance, are not considered.

8.4 Methodological implications

This study has indicated a relatively novel methodology in studying multilingual acquisition. For a growing field, new research methods and designs are constantly growing and inviting debate (Cabrelli-Amaro, Flynn and Rothman, 2012). The methods involving variables such as

a multilingual learner, a geographical context where this learner is found and the effects of previously learnt languages on the subsequent language being learnt are clear. But the methods for examining the effects of the type of multilingual acquisition (concurrent acquisition versus consecutive acquisition) might be novel.

Firstly, to achieve a holistic picture of the interlanguage systems of the L3 learners, the tests which were used as a means of eliciting data consisted of two versions, with the L3 group completing both versions. Secondly, the study compared two groups of learners (a group who were learning only L2 English and a group who were learning both L2 English and L3 French) who had the same native language, Swahili. This design followed the prediction that if the L1 Swahili has a positive influence on these subsequent languages, the L2 English production by the learners who learn both L2 English and L3 French will not only pattern like that of the learners who learn only L2 English, but also there would be no difference between the L2 English and L3 French in terms of production of DPs headed by articles. Different from other previous studies on L3 acquisition of functional categories, the current study takes a holistic perspective. Thus, it looks at both L2 and L3 interlanguage systems in a multilingual learner of two foreign languages.

From this perspective, the current study, different from other studies; has considered a number of multilingual acquisition issues. Firstly, this study aimed at looking at the interlanguage characteristics of a multilingual learner in different developmental acquisition stages. By so doing, the current study does not only remain with an analysis of the L3 initial state. The cross-section design and the analysis from the language proficiency test helped to analyse the obtained data on the bases of two developmental stages: The initial state and the interlanguage developmental stage. Secondly, the ideas proposed in the DMM (Herdina & Jessner 2000 & 2002) that multilingualism is a dynamic system and that in the multilingual acquisition process

all the language systems available in the mind of the learner can influence each other are considered. Thirdly, the idea that the learner with more than two linguistic systems in his mind possesses a greater linguistic awareness (Jessner, 2006) than a learner with a single language system is also assessed. According to the linguistic awareness view, the former normally outperform the latter. Lastly, a focus on the multilingualism perspective, proposed by Cenoz (2013), is also considered. Therefore, with such a comparison, the concurrent acquisition process is revealed to possess some source of complications in multilingual acquisition. Moreover, this method has not only brought forward such an understanding about the effects of previous languages on the subsequent language; but also went further to reveal the interactions among the languages involved and the effects of the process of acquisition.

8.5 Limitations and recommendations for future research

This study limited itself to multilingual acquisition in which the languages in question are acquired concurrently. This was done by examining the acquisition of DPs headed by articles, specifically with (in)definite and number features. The main goal of the current study was to see if the acquisition process (the concurrent acquisition) has a role in regulating the insights (for example, language transfer) pertaining to multilingual acquisition. Moreover, the study limited itself to analysing the acquisition of DPs in L2 English and L3 French as foreign languages by L1 Swahili speakers in Tanzania. The combination of this comparison included learners who learn only L2 English and those who learn both L2 English and L3 French, with both groups sharing the same L1 and similar linguistic backgrounds.

The above methods have led us towards the insights concerning the effects of concurrent multilingual acquisition. However, I admit that, in the line with the above limits of the current study, there are some factors which might have affected the current results. Hence, future researchers should be aware of these factors. Firstly, the current subjects' linguistic

backgrounds were divergent and difficult to control. Some had Swahili as their L1 (those from urban areas) while others (those from rural settings) were L1 bilinguals because they have other ethnic languages. In this regard, it can be assumed that even the L2 group (those who were learning L2 English only), were not true L2 learners but multilingual as well.

Secondly, there were no proficiency tests administered in either of the target languages. Only a grammar placement test in article usage was administered. The placement test was done to be sure that the participants had the article system in their linguistic repertoires and if such system maps their level of instruction (the grading of the test is presented in chapter five). In this regard, it is difficult to say that the current results are really of initial state (the earlier linguistic system), although the proficiency level was operationalized as the level of instruction to which the participants belonged. Thirdly, the study did not compare the French only group with those learners who learn both English and French. So, it was difficult to control whether there was a delay in French acquisition under the influence of L2 English. Finally, no native control groups were recruited. Although I have given some reasons (in chapter five) for not including native control groups in the current study, having a design including native groups will provide further insights into concurrent multilingual acquisition.

The rest of this section provides some proposals for future research. Firstly, this study used proximal language combination of the participants of the same L1 which is distal to both target languages. What remains unclear is whether different types of multilingual concurrent acquisition can reveal the same findings or whether these findings can vary regarding the number of languages being learnt concurrently. In this regard, research which examines different proximal and distal language combinations are invited in the future. Researchers can for example, compare the L2 and the L3 production of two different groups of multilingual concurrent acquisition.

Specifically, research could compare a group which is learning concurrently two non-native languages ($L1 \rightarrow L2/L3$) and one which is learning concurrently three or four non-native languages ($L1 \rightarrow L2/L3/L4$), or two groups with the same L1 and L2, but learning concurrently the same L2 with a different L3, or comparing two groups of learners with different L1s who are learning concurrently two more proximal or distal languages after their L2; where the first group's L1 is proximal to one or both of the target languages and the second group's L1 is distal to both target languages. It should be noted however that getting a combination of the above proposed groups is still problematic given the reality of multilingual acquisition contexts. Yet, these combinations can shed light upon the unknowns of concurrent multilingual acquisition.

Secondly, the effect of concurrent acquisition can also be examined for the same linguistic feature (let say DPs); but in different L3 target languages acquired concurrently with another L2. This can help to disentangle the difficulties caused by the nature of the target language grammar itself from the difficulties created by the concurrent multilingual acquisition.

Thirdly, future research can consider examining other linguistic features apart from DPs headed by articles (e.g. verbs, nouns, clauses) at various linguistic levels (morphology, syntax, semantics and phonology) with different foreign languages in different dimensions of research contexts (think of other parts of the world where multilingualism is a norm).

Fourthly, adding a larger number of participants and/or examining the multilingual concurrent acquisition through longitudinal research can also elicit more insights about this type of acquisition and multilingual acquisition in general. In addition, comparing a group which learn L3 French only to that group which learn both L2 English and L3 French can shed light more upon the delay in L3 acquisition under the influence of L2.

Fifthly, future research can consider the cognitive aspects of language acquisition. For example, one may wish to know if the metalinguistic awareness with the concurrent multilingual acquirer is same as that of the consecutive multilingual acquirer. In this regard, the two groups can be studied and compared in terms of the learning strategies, processing ability and competence and proficiency levels in the target languages.

Sixthly, in the context like Tanzania, future researchers can consider the factor of urban and rural contexts. Researchers can for example examine if there would be any difference in the interlanguages of the concurrent acquirers in urban and those in rural provided that English is more prominent in urban. Moreover, the effects of the whole language system (other languages apart from English and Swahili) presents in the mind of the learners can be of interest to research in future. This can be done by examining the group of learners who speaks only Swahili as their mother tongue and the group of those learners who speak Swahili and other local languages as their mother tongues.

Seventhly, concurrent multilingual acquisition can be examined from other perspectives. In psycholinguistics, for example, researchers can examine how issues such as attitude, motivation and communicative anxiety vary with respect to the number of languages being learnt concurrently or consecutively. Furthermore, from a sociolinguistic perspective, we can determine how the issues concerning language policy affects multilingual acquisition practices in. In education, we can examine the effects of classroom didactics by investigating the relationship between theory and practice, for example, the relationship between learners' multilingual production tendencies and classroom methods used by the teachers. In addition, we can examine the effects of the factors such as role of input and the misleading input. According to Slabakova (2017), misleading input also includes any form of incorrect oral and written foreign language utterances which a learner is exposed to. From an educational

perspective we can also examine the effects of having enough time for target language maintenance (Herdina and Jessner, 2000; 2002). Therefore, researchers can examine in the future the difference between the interlanguage of a multilingual learner who uses the target languages at school (and in most cases during classroom conversation) and of the multilingual learner who gets exposure to such contexts where they can naturally use the target languages. The teacher role, and the teacher's beliefs and attitudes about multilingual competence (Griva and Chostelidou, 2012), multilingualism and multilingual pedagogies (Haukås, Å. 2016) and multilingual pedagogies and initial training (Portelés and Martí, 2020) are other factors which can be studied in future by multilingual acquisition researchers, especially from educational and pedagogy perspectives. In fact, developing multilingual competence requires a multilingually skilled teacher (Cenoz, 2009; Jessner, 2008). Therefore, future research could compare the interlanguages of learners who are taught by, according to Jessner (2008), teachers who themselves possess an agreeable level of multilingual competences and have a high level of proficiency in the languages; and those who are/do not. In the last section of this chapter, I present the general conclusions from the current study.

Finally, Future researchers can consider doing a qualitative analysis and including individual results. This will help to show a correspondence and a difference in the use of articles. In addition, future researchers can consider analysing L2 English cross-sectionally in order to capture the L2 acquisition path.

8.6 General conclusions

In conclusion, multilingual acquisition is complex. However, this complexity varies in relation to the type of multilingual acquisition. This study is an attempt to tease apart the complexity involved in acquisition of an L3 (one instance of multilingual acquisition) and the concurrent acquisition of two or three foreign languages (another instance of multilingual acquisition). In

general, this study has shown that some facts in the acquisition of multiple languages are not only linguistics-related but also process-related. Acquiring multiple languages one after another is not the same as acquiring multiple languages concurrently. Therefore, difficulties and complications in the acquisition of multiple languages become more complex when concurrent acquisition is considered. Moreover, the influence of one language on another can also become more complex when these languages are acquired side by side.

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APPENDIX A

Research Tools and Questionnaires for Sampling

a) English Test Version

F II/ ENG

SCHOOL_____

A Questionnaire for L2 English Group

Do not write your name anywhere on this paper

A. The fill in blanks cloze test

Fill in each blank with appropriate English article, (*a, an, the*). For a sentence where you think that there is no need of article write a symbol, \emptyset .

1. Give me 1) pen which is on the table.
2. Is your mother working in 2)old office building in town?
3. What do you usually have for 3) breakfast?
4. There were 4) motorcycles in 5) parking. Therefore, 6) car of my brothers parked in front of 7) house.
5. 8) cat can climb 9)trees. But, 10)dogs which we took to hunt yesterday failed.
6. I saw 11) dog, 12) dog ran away.
7. 13) Congo river is in Africa.
8. 14)Lake Victoria is 15) biggest lake in 16).....East Africa, but 17).....lake Turkana in 18)eastern Kenya is small.
9. Swahili language of many Bantus is spoken mostly in Tanzania, but 19)English is spoken all over the world.
10. Donata is 20) English teacher.

B. The narrative cloze test

Complete the following story using (*a, an, the*) in the blank spaces. In the space where you think no need of article put the symbol \emptyset .

There has never been 21).....more exciting time to produce 22) new dictionary. Everything is changing and expanding:23) English language itself, 24)technology that helps us to describe it, and 25)needs and goals of those learning and teaching 26)English. 27) 1980s saw the development of 28)first large corpora (special collections) of English text.

29)Another of the Macmillan English Dictionary's innovations is that two similar but separate editions have been created from 30)same database: one for learners whose main

target variety is 31)American English, 32).....other for learners of British English. The differences are small but significant.

The Macmillan English Dictionary is 33)product of 34) the good linguistic data and high-quality people. It has been 35)privilege to work with such 36)talented and creative team, and I would like to thank 37)team for producing such 38).... excellent book. I hope you enjoy 39)results of our hard work and find the dictionary 40)....pleasure to use.

(Adapted from: Julia Miller, English for Uni, www.adelaide.edu.au/english-for-uni 9)

C. Truth Value Judgement Task (TVJT)

For each question, read the two sentences carefully, and say if the underlined word (s) in the first sentence correspond to their meaning provided in the second sentence; by writing YES or NO in the space provide after the second sentence. Whenever you say NO, please, rewrite the first sentence correctly by supplying the correct English article form.

41. Women live longer than men. I mean all women in the world.
42. There is a bird on the tree. We usually hear it singing in the morning.
43. I bought soda and water. I drank the soda first.
44. I will buy you a shirt. I refer to the blue shirt that you asked for.
45. AZAM will reward a winner. They have to wait until the match is finished.
46. I bought the magazine. The magazine was about economic crisis.
47. Sun is always hot. There is one sun all over the world.
48. Dogs like meat. Give them more meat today evening.
49. The water is necessary for life. I refer to it as general and uncountable thing.
50. I am going to buy a bag next week. I will buy the one we saw at Mkude's shop.
51. I like a book about Mwl. Nyerere. We used to read it in STD seven, do you remember?
52. I picked up my suitcase and a handle broke up. You know about the suitcase.
53. I have just drunk milk. You kept it for me yesterday.
54. I saw the cow. You also saw it yesterday in the garden.
55. I need a teacher. Ms. Mwakipesile.

56. I am looking for a hotel. Kilimanjaro Hotel.
57. Peter always carries the book in his bag. Let me ask him which books he has today.
58. He is a good boxer. He has never lost a single match.
59. I am looking for the Manager. Any, manager.
60. One of the students said, a professor will be late. Probably, he will not finish the module we started yesterday.
-

THANK YOU FOR YOUR PARTICIPATION

b) French Test Version

F. II, III & V French

SCHOOL _____

A Questionnaire for L3 French Group
Do not write your name anywhere on this paper

A. The fill in blanks cloze test

Fill in each of the blanks with appropriate French articles (*une, un, la, le, les, de la, du, des*) For a sentence where you think that there is no need of article write a symbol, \emptyset .

1. Il y avait 1) _____ motos dans 2) _____ parking. Alors, 3) _____ voiture de mon frere est garée en face 4) _____ maison.
2. J'ai vu 5) _____ chien dehors. 6) _____ chien a fui
3. 7) _____ chat peut grimper aux arbres. Mais 8) _____ chiens qu'on a pu chasser dans 9) _____ forêt ont échoué.
4. Hier, 10) j'ai pris _____ lait et 11) _____ pain qui étaient dans 12) _____ frigo.
5. 13) _____ fleuve Congo est en Afrique.
6. 14) _____ langue Swahili 15) _____ Bantus est parlé en Tanzanie, mais 16) _____ Anglais est parlé dans 17) _____ monde entire
7. Donata est 18) _____ enseignante d'anglais.
8. Passe-moi 19) _____ tasse qui est sur le plateau.
9. Il est allé s'acheter 20) _____ chaussures.

B. The narrative cloze test

Complete the following story using appropriate French article forms (*un, une, la, le, les, des, du, de la*) in the blank spaces. In the space where you think no need of article put the symbol \emptyset .

Beaucoup d'ingrédients utilisés dans 21) _____ cuisine africaine sont totalement inconnus 22) _____ Occidentaux. 23) _____ jus de bissap, 24) _____ beurre de karité, le fonio ou 25) _____ lait de 26) _____ chamelle sont pourtant très utilisées dans 27) _____ cuisine 28) _____ pays du Sahel et ils sont très bons pour 29) _____ sante.

30) _____ bissap, 31) _____ plante qu'on appelle aussi oseille de Guinée ou 32) _____ karkade, est connu pour son boisson de couleur rouge. On le boit en sirop ou en boisson chaude et on en fait 33) _____ confiture. On a utilise aussi 34) _____ feuilles dans 35) _____ préparation, par exemple, du traditionnel thieboudienne sénégalais (plat à base de poisson et de riz) et d'une manière Générale, il accompagne très bien tous 36) _____ plats de poisson.

En couscous, beignets ou farines, le fonio est une des grandes céréales d'Afrique francophones. Facile à digérer, il est recommandé aux diabétiques. On l'a longtemps considéré comme 37) _____ produit de luxe, parce qu'il fallait près de deux heures deux kilos de grains. Mais, 38) _____ enseignants a inventé 39) _____ machine pour le décortiquer, et supprimer 40) _____ long travail du pillage.

(Adapted from: Mazaure, C. and Siréjols, É. (2003:22) On y vas. CLE International. Paris)

C. Truth Value Judgement Task (TVJT)

For each question, read the two sentences carefully, and say if the underlined word (s) in the first sentence correspond to the meaning given in the second sentence by writing, YES or NO, in the space provide after the second sentence. Whenever you say NO, please, rewrite the first sentence correctly by supplying the correct French article form.

40. Eau est nécessaire pour la vie. L'utilisation des articles pour définir un terme dans le sens général.

41. Le français est une langue vivante. Il faut l'écrire avec l'article défini.

42. Elle a des enfants. On ne sait pas combien d'enfants.

43. Les enfants aiment les bonbons. Chaque enfant en général.

44. J'ai acheté une banana et des oranges. J'ai d'abord mangé la banana.

45. Il y a les invités dans le salon. Je ne les connais pas.

46. Il y a une fille dans ma chambre. Son nom est Jacqueline.

47. Il y a des filles dans la rue. On les a vues hier à l'église

48. Cigarettes ne sont pas bonne pour la sante. Tous les types de cigarettes sont dangereux.
49. C'est le médecin de Marie. Il a un diplôme de docteur en médecine.
50. C' est un avocat. Elle a le metier d' aider les gens à comprendre la loi.
51. Il travail avec des copines. On connaît ses copines.
52. Il travail avec les copines. On ne les connaît pas.
53. Les joujoux sont intéressants. Mon bébé a plein de joujoux.
54. Les voix des chanteurs sont belles. L'utilisation des articles avec le nom féminin, pluriel et indéfini.
55. Il aime la viande. On sait qu'il aime le boeuf.
56. J' ai ma classe de français le lundi. L'utilisation de l'article défini avec les jours de la semaine pour indiquer l'habitude.
57. Il y a un bon médecin ici. Il a vaccine nos enfants contre la rougeole.
58. Il est le professeur. Il enseigne les mathématiques.
59. Paris, le capitale de la France; est une grande ville.
60. Le dimanche est le dernier jour de la semaine. Le premier jour est lundi.

D. Story writing from a series of pictures.

Below are two pictures with four parts each. The parts are in sequences which constitutes a story. Study each picture carefully (you have been given a list of vocabulary for help) and write a story in French (five sentences for each picture) relate to what is happening in each picture. The first picture is picture A and the second is picture B.

PICTURE A:

- 61 _____
- 62 _____
- 63 _____
- 64 _____
- 65 _____

PICTURE B:

66 _____

67 _____

64 _____

69 _____

70 _____

(The pictures were downloaded from: <https://za.pinterest.com/maestertimo/4-step-sequence-story-pictures/>)

List of Vocabularies:

PICTURE A:

Vocabularies:

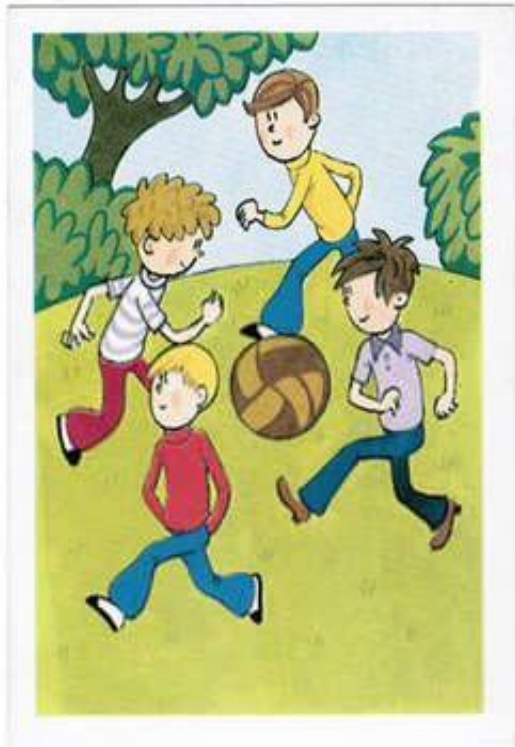
PICTURE A:

Swahili	English	French
Watoto	Children	Enfants
Mpira	Football	Football
Mti	Tree	Arbre
Tawi	Branch of tree	branche
Kiota	Nest	Nid
Ndege	Bird	Oiseau
Kiti	Chair	Chaise
Cheza	Play	Jouer
Kimbia	Run	Courir
Ruka	Jump	monter
Anguka	Fall down	Tomber
Kaa	Sit down	

PICTURE B

Msichana	Girl	Fille
Mvulana	Boy	Garçon
Mti	Tree	Arbre
Matunda	Fruits	Fruits
Kikapu	Basket	panier
Panda juu	Climb	Monter
Angua	Pick	cueillir
Jaza	Put	Mettre
Beba	Carry	porter

PICTURE A



PICTURE B



THANK YOU FOR YOUR PARTICIPATION

c) Grammar Placement Tests

French

Fill in the blanks with appropriate French article form

1. Passe-moi _____ tasse qui est sur le plateau.
2. La baleine est _____ mammifère.
3. _____ marée du siècle est annoncée pour vendredi.
4. Il faudrait s'arrêter dans _____ station-service.
5. Voici _____ produit qui ne ressemble à aucun autre.
6. _____ boulanger du quartier fait du pain au levain.
7. Il a enfin rencontré _____ femme de sa vie.
8. C'est _____ maison que j'habitais autrefois.
9. Venez prendre _____ verre avec nous !
10. Il est allé s'acheter _____ chaussures.

Source: <http://www.TolearnFrench.com>

English

Fill in the blanks with appropriate English article form

There are different kinds of reward. There is 1)..... reward which has no natural connexion with 2)things you do to earn it and is quite foreign to 3)desires that ought to accompany those things. Money is not 4)....natural reward of love; that is why we call.... man, mercenary if he marries 5).....woman for 6).....sake of her money. But marriage is proper reward for 7).....real lover, and he is not mercenary for desiring it. General who fights well in order to get a peerage is mercenary; 8)....general who fights for victory is not, victory being 9).....proper reward of battle as marriage is 10).....proper reward of love.

Source: www.adelaide.edu.au/english-for-uni

d) The Research Bio-Data Questionnaire for Respondents

UNIVERSITY OF DAR ES SALAAM
COLLEGE OF HUMANITIES
DEPARTMENT OF FOREIGN LANGUAGES AND
LINGUISTICS

I am Deniza J. Nyakana, a lecturer at University of Dar es Salaam and a postgraduate student at Stellenbosch University, South Africa. I am looking at how Tanzanian learners of English and French in secondary and advanced secondary schools learn and use articles in these languages. In this regard, I am looking for learners who will be willing to take part in my study. So, I would be grateful, if you want to take part in my study, if you would fill in this questionnaire which includes your linguistic background information.

Personal Information

1. Name: _____ Form _____

Linguistic background**Complete the blank spaces with appropriate answer**

1. Is Kiswahili your native or second language? _____
2. If Kiswahili is your second language, mention your native (first) language?

3. Have you ever visited or lived in a French or English-speaking country? _____ If yes, for how long? _____

Please list in the following table all foreign languages you know. Indicate the age at which you began to learn each language, and the length of time you spent learning each of them.

Language	Starting Age	Time Spent

Please list in the table below the languages you speak and, for each (including Kiswahili), indicate how fluent you are on a 1-5-point scale below, under the language skills provided.

1. Not fluent at all or with great difficulty
2. Fluent but with relative difficulty
3. Fluent but with mistakes from time to time
4. Fluent with sparse mistakes
5. Native like fluency

Language	Speaking	Listening	Writing	Reading

THANK YOU FOR YOUR COOPERATION!

e) Post Experiment Questionnaire

1. Participants' Attitudes Towards the Test and the Recruitment Process (Choose the appropriate answer by ticking in front of it)

a) How did you find the test?

Very difficult!

Difficult.

Not difficult at all.

b) The content of the test is _____ to me

New

Familiar

Neither new nor familiar

c) I had a problem with the instruction given about the test and the recruitment process.

Yes.

No.

I am not sure.

d) I managed to finish writing the test within the planned duration.

Yes.

No.

I am not sure

e) Did you experience any other environmental factors (such as, noise, weather condition, classroom arrangement), which seemed to disturb the test processes

Yes.

No.

I do not know

2. Participants Characteristics: Answer the following questions as truthfully as possible. Circle the T if the statement is generally true for you; and the F if the statement is generally false.

1. I felt very panicky when I was writing the test. T F

2. During the test, I find myself thinking of the consequences of failing. T F

3. While taking the test, I find myself thinking of other schoolwork which are ahead of me. T F

4. I felt fatigue, bored during the test T F

5. I felt confident and relax during the test because I was informed beforehand that the test is not for my academic grading. T F

APPENDIX B

Research Clearances Samples and Ethics Agreements

a) Stellenbosch University REC Approval

APPROVED WITH STIPULATIONS

REC Humanities New Application Form
15 October 2018

Project number: REC-2018-7309

Project title: The Multilingual Acquisition of Determiner Phrases in L2 English and L3 French by Swahili speakers in Tanzania

Dear Ms Joash Nyakana

Your REC Humanities New Application Form submitted on 25 September 2018 was reviewed by the REC: Humanities and approved with stipulations.

Ethics approval period:

Protocol approval date (Humanities)
15 October 2018

Protocol expiration date (Humanities)
14 October 2019

REC STIPULATIONS:

The researcher may proceed with the envisaged research provided that the following stipulations, relevant to the approval of the project are adhered to or addressed

RESPONSE TO REC STIPULATIONS

REC Humanities Application Form- Project Number: GENL-2018-7309

19 October 2018

Project Title: The Multilingual Acquisition of Determiner Phrases in L2 English and L3 French by Swahili Speakers in Tanzania

Dear REC co-ordinator,

Thank you for the information that my REC application has been approved, though with stipulations. This letter therefore serves as a response and action to those stipulation posed by the REC reviewers.

THE ACTION OR RESPONSE TO EACH STIPULATION:

1. Inclusion of all information in the parent consent form, especially that, the test is not for academic grading but for research purpose.
-The information is added on the form and the new version of the form re-uploaded
2. If the confidentiality agreement is also a concern for the teachers who will assist to administer the test.

- The response is YES. The agreement meant for all research assistants. I have added the information about the test administering and re-uploaded the new version of the agreement.

3. Keeping the hard copies in the safe instead of the briefcase.

-Thank you for the recommendation. Agreed and accepted.

4. About the inclusion of the information in the parent consent form, that the test will not be graded

-The information is added and the new version re-uploaded.

5. Changing the risk classification to medium in section 10.

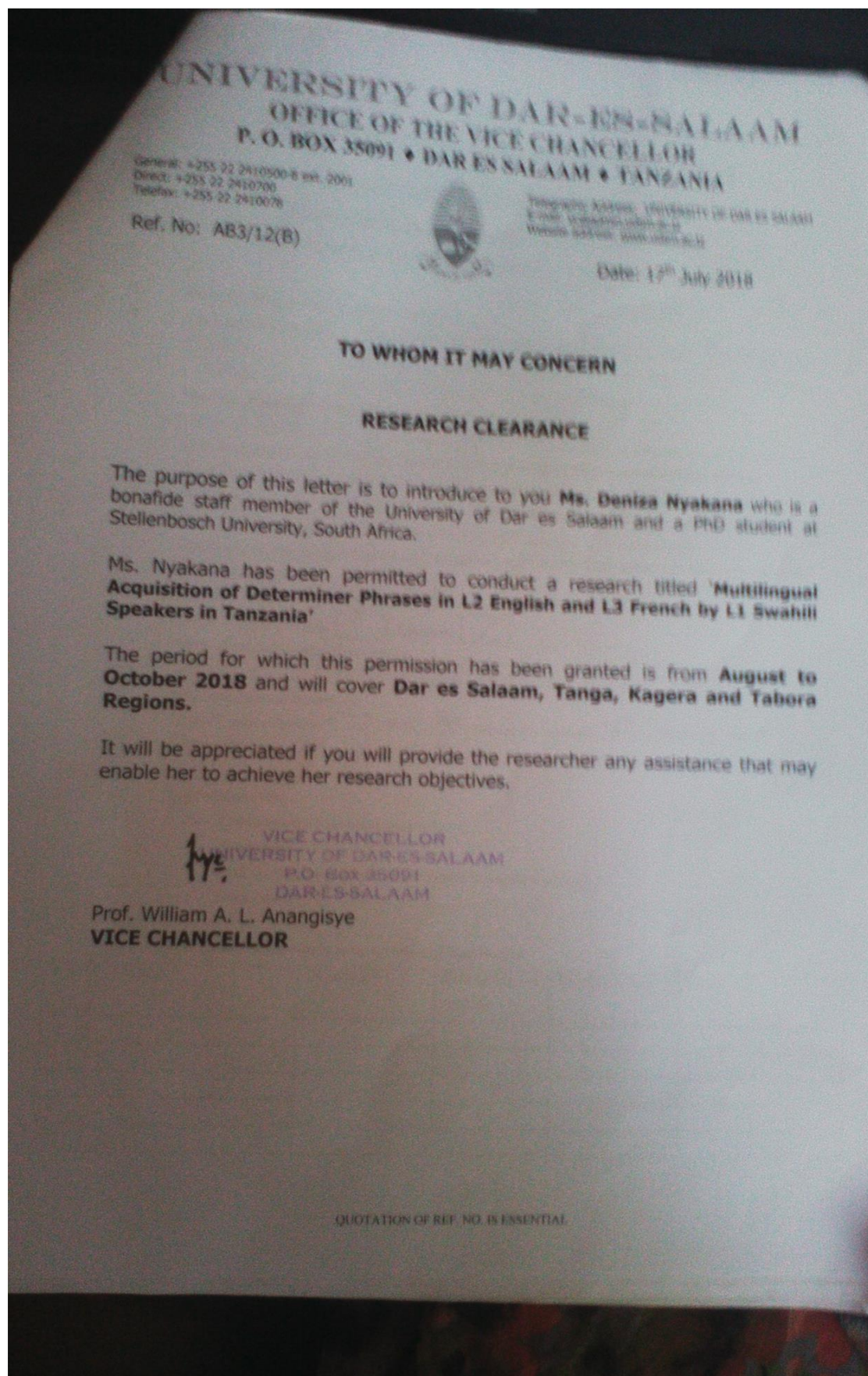
-Done

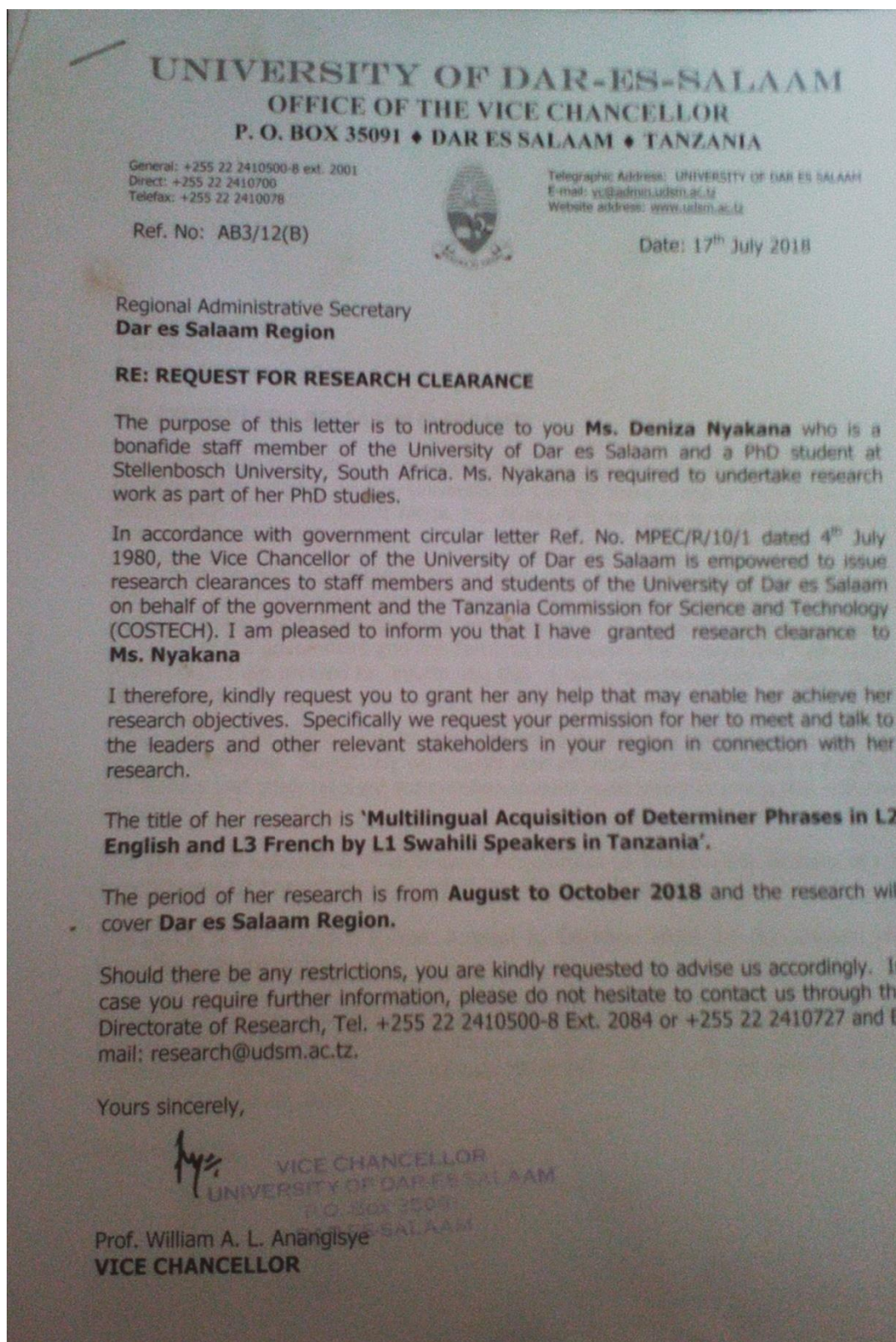
6. About the permission from sampled school.

-The University of Dar es Salaam permission is supported by permission from the regional, district and municipal authorities. I have Uploaded extra documents from Dar es Salaam regional, district and municipal authorities, as a sample for other places.

Regards, Deniza Nyakana 22455744-Department of General Linguistics

b) Sample Research Permits from Tanzanian Authorities





The United Republic of Tanzania

Prime Ministers' Office

REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

ILALA DISTRICT

Phone Address:

Phone No: 2203185/2203182

In reply quote: Ref. No: AB.60/87/01/

Municipal Director,
P. O. Box 20950,
Ilala,
DAR ES SALAAM.



DISTRICT COMMISSIONER'S OFFICE

ILALA DISTRICT

P. O. Box 15486,

DAR ES SALAAM

Date: 02/10/2018

RE: RESEARCH PERMIT

Prof./Dr./Mr./Mrs./MS./Miss: DENIZA JOASH N-ALICANA
from The University of Dar es Salaam she/he has been
permitted to undertake a field work research on "Multilingual
Acquisition of Determiner Phrases in L2 English
and L3 French by Swahili Speakers in Tanzania"
case study at Ilala District from October 2018 to November 2018

Therefore, you are asked to give the said researchers necessary assistance and Cooperation.

District Administrative Secretary
ILALA

Copy:

Principal/Vice Chancellor,
University of Dar es Salaam

HALMASHAURI YA MANISPAA YA ILALA

BARUA ZOTE ZIPELEKWE KWA MKURUGENZI WA MANISPAA

SIMU NA. 2128800
2128805
FAX NO. 2121486



OFISI YA MKURUGENZI
I MTAA WA MISSION
S.L.P 20950
11883 - DAR ES SALAAM
03.../10.../2018

KUMB. NA. IMC/AF.3/31

Mkuu WA IDARA
YA ELIMU
SEKONDARI

YAH: KUWATAMBULISHA... DENIZA JOASH M-TAKONA

Husika na mada tajwa hapo juu.

Halmashauri ya Manispaa ya Ilala: imeruhusu Watumishi
toka UNIVERSITY OF DAR ES SALAAM kufanya
'Project/Field/Research' juu
ya UJIFUNZAJI WA KIINGEREZA NA KIFARANSIA katika ofisi
yako. "Project/Field/Research" itaanza kuanzia tarehe
8 / 10 / 2018 hadi 30 / 11 / 2018.

Orodha ya majina yao imeambatanishwa na barua hii.

Tafadhali wape Ushirikiano.

Nakutakia kazi njema.

R. Muna

Kny: MKURUGENZI WA HALMASHAURI
MANISPAA YA ILALA
Kny: MKURUGENZI
HALMASHAURI YA MANISPAA YA ILALA

THE UNITED REPUBLIC OF TANZANIA
President's Office
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

DAR ES SALAAM REGION
Phone Number: 2203158
Fax number: 2203158
email: ras@dsm.go.tz
website: www.dsm.go.tz

REGIONAL COMMISSIONER'S OFFICE,
3 RASHID KAWAWA ROAD,
P.O. BOX 5429,
12880 DAR ES SALAAM

In reply please quote:
Ref. No.

02110 / 2018

District Administrative Secretary,
ILALA
P. O. Box
DAR ES SALAAM.

RE: RESEARCH PERMIT

Prof/Dr/Mrs./Ms/Miss DENIZA JORSH NYAKANA is
student/Researcher from University of Dar es Salaam has been
permitted to undertake research on Multilingual Acquisition of
Determiner Phrase in L2 English and L3 French by
Swahili Speakers in Tanzania.

From October 2018 to December November 2018.

I Kindly request your good assistance to enable her/his research.

For; REGIONAL ADMINISTRATION SECRETARY
DAR ES SALAAM

Copy: Municipal Director,
ILALA
DAR ES SALAAM.

Principal/Vice Chancellor
University of Dar es Salaam

HALMASHAURI YA MANISPAA YA ILALA

BARUA ZOTE ZIPELEKWE KWA MKURUGENZI WA MANISPAA

P.O. BOX 20950
PHONE NO: 2128800
2128805
FAX NO. 2121486



Ofisi ya Mkurugenzi
Wa Manispaa Ilala
1 Mission Street
11883 - Dar es salaam

Kumb. Na. IMC/LR.6/111/113

Mkuu wa Shule
Shule ya Sekondari Dar es Salaam, Zanaki,
DAR ES SALAAM.

17/10/2018

YAH: KUMTAMBULISHA NDUGU DENIZA JOASH NYAKANA

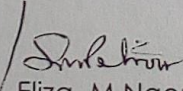
Husika na kichwa cha habari hapo juu.

Halmashauri ya Manispaa Ilala imemruhusu mtajwa hapo juu ambaye ni mwanachuo wa **UNIVERSITY OF DAR ES SALAAM** kufanya utafiti katika Shule yako.

Utafiti juu ya **Ujifunzaji wa Kiingereza na Kifaransa**

Utafiti utafanyika kuanzia tarehe **08/10/2018** hadi **30/11/2018**. Tafadhali mpe ushirikiano.

Nakutakia kazi njema.


Eliza M. Ngonyani

**KNY: MKURUGENZI WA MANISPAA
HALMASHAURI YA MANISPAA YA ILALA**

Nakala: Mkurugenzi wa Manispaa - (aione kwenye jalada)
Halmashauri ya Manispaa ya Ilala

c) Agreement and Consent Forms

Parents Research Consent Form *Kibali cha Mzazi wa Mwanafunzi*

**STELLENBOSCH UNIVERSITY
FACULTY OF ARTS AND SOCIAL SCIENCES
DEPARTMENT OF GENERAL LINGUISTICS**

***CHUO KIKUU CHA STELLENBOSCH
KITIVO CHA SANAA NA SAYANSI YA JAMII
IDARA YA ISIMU
Ridhaa ya Kushiriki katika Utafiti***

**Re: The Multilingual Acquisition of Determiner Phrases in L2 English and L3 French by
L1 Swahili speakers in Tanzania**

***Yah: Uelewa wa Miundo ya Virai Nomino kwenye Kiingereza kama lugha ya pili na kwenye
Kifaransa kama lugha ya tatu kwa wanafunzi wa sekondari wazungumzaji wa lugha
mama ya Kiswahili Tanzania.***

You are receiving this letter because your child might be a suitable candidate for the research project mentioned above. The research is to be conducted by DENIZA JOASH NYAKANA from the Department of General Linguistics at Stellenbosch University in South Africa. The study is to form the basis of her dissertation that will be submitted in fulfilment of a PhD degree in General Linguistics.

As such, the results of the study will be published in the form of a dissertation and possibly, at a later stage, also in the form of articles in scientific journals.

The study requires participants who are native speakers of Kiswahili who are secondary school learners of English in Tanzania. If you are willing to allow your child to participate in the study, please read the information below and complete the attached consent form.

Unapokea barua hii kwa sababu mtoto wako anaweza kufaa kushiriki kwenye utafiti uliotajwa hapo juu. Utafiti huu utafanywa na DENIZA JOASH NYAKANA kutoka idara ya Isimu katika Chuo Kikuu cha Stellenbosch, Afrika ya Kusini. Utafiti huu ni sehemu ya masomo yake ya shahada ya uzamivu katika isimu.

Hivyo, matokeo ya utafiti huu yatachapishwa katika mfumo wa tasnifu na ikiwezekana, hapo baadaye, pia katika machapisho ya kisayansi.

Utafiti huu unahitaji wahasika ambao ni wazungumzaji wa Kiswahili kama lugha mama ambao pia ni wanafunzi wa kiingereza Tanzania. Kama upo tayari kumruhusu mwanao kuhusika katika utafiti huu, tafadhali soma taarifa ifuatayo kisha ujaze fomu ya hati iliyoambatanishwa

ili kutoa ridhaa kwa mwanao kushiriki kwenye utafiti.

1. **PURPOSE OF THE STUDY:** Due to the fact that Tanzanian education is multilingual in nature from primary school and because there is a need to understand the characteristic of the knowledge underlying in the multilingual learner for different purpose such as planning for language teaching methods and language of instruction, this study will therefore seek to understand the acquisition of articles and the characteristics of multilingual learners' interlanguage structures and to provide teachers with suggestions regarding pedagogical practice which may enhance the acquisition of articles.

LENGO LA UTAFITI: Kwakuwa ujifunzaji wa lugha Tanzania unahusisha lugha nyingi, kuna haja ya kuelewa namna mwanafunzi anavyojifunza lugha hizo, kwa ajili ya kuboresha mbinu za ufundishaji wa lugha na kuchagua lugha ya kufundishia. Hivyo, utafiti huu unalenga kujua juu ya nini kinatokea katika ufahamu wa mwanafunzi anapojifunza lugha zaidi ya moja. Pia utafiti huu unalenga kutoa mapendekezo kwa walimu na waandaji mitaala ya lugha; mapendekezo ambayo yanaweza kuboresha mbinu za ufundishaji wa lugha.

2. **PROCEDURES:** If your child volunteers to participate in this study, we would first ask you as parent/primary caregiver to sign the form whereby you give permission for your child to participate in the study.

If you allow your child to participate in this study, we would ask him/her to do the following things:

- 1 Complete a short language background questionnaire
 - ii. Do the tasks in English and/ or French.

UTARATIBU: Kama mwanao ataridhia kushiriki kwenye utafiti huu, tutakuhitaji kama mzazi/mlezi kusaini fomu ya hati iliyoambatishwa ambapo utatoa ruhusa ili mwanao aweze kushiriki katika utafiti huu.

Kama utamruhusu mwanao kushiriki kwenye utafiti huu, tutamuhitaji kufanya yafuatayo:

- 2 Kujaza fomu inayohitaji taarifa zake za lugha
 - ii. Kufanya jaribio la maswali ya Kiingereza na/au Kifaransa.

3. **TIME AND DURATION:** The tasks in French or English will be done at their respective schools and during the normal school timetable, in their classroom. The test will take a duration of one hour and a half.

MUDA WA JARIBIO: Jaribio la Utafiti katika kifaransa au kiingereza, litafanyika shuleni kwa muda wa kawaida wa ratiba za shule tena ndani ya madarasa yao ya siku zote. Jaribio litachukua muda wa saa moja na nusu tu.

4. **POTENTIAL RISKS AND DISCOMFORTS:** There are no foreseeable risks to your child or anyone related to him/her.

UWEZEKANO WA HATARI NA USUMBUFU: Hakutakuwa na hatari yeyote kwa mtoto wako wala kwa yeyote anayemuhusu.

5. **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY:** By participating in this study, s/he will help herself/himself and future learners of English

and French because teachers will know which areas need special pedagogical attention in the English/French classroom.

FAIDA KWA WASHIRIKI NA/AU JAMII: *atanufaika yeye na wanafunzi watakaofuata kwa sababu walimu watafahamu ni maeneo gani yanahitaji mkazo katika ufundishaji kwenye madarasa ya Kiingereza na Kifaransa.*

- 6. PAYMENT FOR PARTICIPATION:** Your child's participation in this study is based on their voluntary willingness. Hence, remuneration will not be involved; but your child will receive a small confectionery present in term of pens and/or notebooks.

MALIPO YA USHIRIKI: *Ushiriki wa mwanao kwenye utafiti huu unatokana na utafiti yake mwenyewe. Malipo hayatahusika; lakini mwanao atapokea zawadi ndogo kama ishara ya shukrani.*

- 7. CONFIDENTIALITY:** Any information that is obtained in connection with this study and that can be identified with your child will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of coding his/her name by using numbers and letters, and data will be kept on a password protected computer. Only the researcher and his supervisors will have access to the original data. The recordings are for research purposes only and the results will not grade your child's academic assessment. To ensure confidentiality, children's names will not be mentioned when results are published.

USIRI: *Taarifa zitakazopatikana kuhusiana na utafiti huu zitabaki kuwa siri na zitatolewa pale tuu utakaporuhusu au zitakapohitajika kwa mujibu wa utafiti. Usiri utazingatiwa kwa kutumia namba na herufi kama sehemu ya utambuzi wake, pia taarifa zake zitahifadhiwa kwenye kompyuta inayolindwa na neno la siri. Ni mtafiti na wasimamizi wake pekee ndio watapata ruhusa ya kuziona taarifa hizo. Rekodi hizo ni kwa ajili ya utafiti tuu. Kuhakikisha usiri, majina ya mwanao hayataatajwa pale matokeo yatakapochapishwa.*

- 8. PARTICIPATION AND WITHDRAWAL:** Your child can choose whether to participate in this study or not. If your child volunteers to participate in this study, s/he may withdraw at any time without consequences of any kind. Your child may also refuse to answer any questions s/he does not want to answer and still remain in the study.

USHIRIKI NA KUJITOIA: *Mwanao ana uhuru wa Kushiriki kwenye huu utafiti au kutoshiriki. Kama mwanao atajitolea kushiriki kwenye huu utafiti, ataweza kujitoia muda wowote bila ya madhara ya aina yeyote. Mwanao ana uhuru wa kutojibu swali lolote ambalo hataki kujibu na kuendelea na utafiti huu.*

- 9. IDENTIFICATION OF INVESTIGATORS:** If you have any questions or concerns about the research, please feel free to contact:

i) Ms. DENIZA JOASH NYAKANA email:
denizajoash@gmail.com Mobile: +255764653822

ii) Dr KATHLEEN HUDDLESTONE email: katevg@sun.ac.za

UTAMBUZI WA MTAFTITI: *Kama una maswali yeyote au hofu kuhusu utafiti huu, tafadhali kuwa huru kuwasiliana na:*

i) Bi. DENIZA JOASH NYAKANA barua pepe:
denizajoash@gmail.com Simu: +255764653822

ii) Dr KATHLEEN HUDDLESTONE email: katevg@sun.ac.za

10. RIGHTS OF RESEARCH SUBJECTS: You and/or your child may withdraw your consent at any time and discontinue participation without penalty. Neither you nor your child is waiving any legal claims, rights or remedies because of the participation in this research study. If you have questions regarding your child's rights as a research subject, contact Ms Clarissa Graham [cgraham@sun.ac.za; +27 21 808 9183] at the Division for Research Development.

HAKI ZA WASHIRIKI: Wewe au mwanao mnaweza kuondoa ridhaa yenu muda wowote na kusitisha ushiriki bila adhabu. Wewe wala mwanao hamtakuwa na madai ya kisheria haki au matibabu kwa ajili ya ushiriki kwenye utafiti huu. Kama una maswali kuhusu haki za mwanao kama mshiriki kwenye utafiti huu wasiliana na Bi Clarissa Graham (cgraham@sun.ac.za ; +27218089183)
Kitengo cha Maendeleo ya Utafiti.

11. SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE:

The information above was given to me by Deniza J. Nyakana, (researcher) in English and Kiswahili. I am in command of this language (s) or it was satisfactorily translated to me. I was given the opportunity to ask questions and these were answered to my satisfaction.

SAHIHI YA MSHIRIKI WA UTAFITI AU MWAKIRISHI WA KISHERIA: Taarifa hapo juu zilizolezwa kwangu na Deniza J. Nyakana (mtafiti) kwa Kiingereza/KiSwahili. Ninaielewa hii lugha au ilitafsiriwa vizuri kwangu. Nilipewa fursa ya kuuliza maswali na maswali hayo yalijibiwa vizuri. Ninaruhusu mwanangu ashiriki katika utafiti huu. Nimepewa nakala ya fomu hii.

Name of the Child/Jina la Mtoto _____

Name of Parent, Legal Guardian or Representative /Jina la Mzazi, Mlezi au mwakilishi Kisheria _____

Signature of Parent/Legal Guardian/ Legal Representative/ Sahihi ya Mzazi, Mlezi au Mwakilishi _____ wa Kisheria _____

Date /Tarehe _____

The Research Assent Form for Participants

UNIVERSITY OF DAR ES SALAAM
COLLEGE OF HUMANITIES
DEPARTMENT OF FOREIGN LANGUAGES AND
LINGUISTICS

I am Deniza J. Nyakana, a lecturer at University of Dar es Salaam and a postgraduate student at Stellenbosch University, South Africa. I am looking at how Tanzanian learners of English and French in secondary and advanced secondary schools learn how to use articles in these languages. In this regard, I am looking for learners who will be willing to take part in my study. So, I would be grateful if you want to take part in my study if you would fill in this form.

If you agree to take part in my study, you will be asked to:

1. Fill in the bio-data form which includes your linguistic background
2. Do different tests on the use of English and/or French articles for one hour and a half

I would like to assure you that the information you supply will be kept confidential and that it will be used only for the purposes of the study. I assure you that, the tasks will not be marked or graded for your academic assessment. They are only for the study.

I would like also to inform you that, the tests mentioned in 2. Above, will be done for one hour and a half during classroom hours in your respective school and classrooms.

A: PERSONAL DETAILS (NECESSARY ONLY FOR SAMPLING PROCEDURES)

3 Name in Full _____

4 School _____ I am Form _____

B: DECLARATION AND SIGNATURE

I am willing to participate in the study and I agree that the researcher, Deniza J. Nyakana, has explained to me about the objective of research and the importance of my participation. And that, I was given the opportunity to ask questions and these were answered to my satisfaction.

SIGNATURE _____ DATE _____

The Research Assent Form for Teachers

UNIVERSITY OF DAR ES SALAAM

COLLEGE OF HUMANITIES

DEPARTMENT OF FOREIGN LANGUAGES AND
LINGUISTICS

I am Deniza J. Nyakana, a lecturer at University of Dar es Salaam and a postgraduate student at Stellenbosch University, South Africa. I am doing a research on how Tanzanian learners of English and French in secondary and advanced secondary schools learn and use articles in these languages. Because this study will be done at your school; and the tests for the same purpose will be administered during the normal classroom timetable, I therefore ask your willingness to such an interruption to your work schedule. The duration of the test is one hour and a half.

If you agree, I will ask you to sign in this assent form below:

A: PERSONAL DETAILS:

5 Name in Full_____

6 School_____Subject_____

B: DECLARATION AND SIGNATURE

I am willing to release the scheduled time for my subject mentioned above for the researcher, Deniza J. Nyakana, who has explained to me about the objective of her research and the procedures to fulfil it.

SIGNATURE_____DATE_____

The Confidentiality Agreement for Research Assistants

UNIVERSITY OF DAR ES SALAAM

COLLEGE OF HUMANITIES

DEPARTMENT OF FOREIGN LANGUAGES AND
LINGUISTICS

I am Deniza J. Nyakana, a lecturer at University of Dar es Salaam and a postgraduate student at Stellenbosch University, South Africa. I am doing a research on how Tanzanian learners of English and French in secondary and advanced secondary schools learn and use the articles in these languages.

As a researcher, I have asked your assistance in participants recruitment, test administering, data cording or statistical analysis. I would like to inform you that, any information provided by the participants should not be disclosed. Thus, I ask you to agree by filling in this confidentiality agreement form; that you will keep participants information as confidential.

A: PERSONAL DETAILS:

7 Name in Full_____

8 Assistant in_____

B: DECLARATION AND SIGNATURE

By signing in this agreement, I declare that I will not disclose any information provided by the participants.

SIGNATURE_____DATE_____